Faculty Programme outcomes (undergraduate and post graduate level)

Faculty - Arts/ Humanities/ social science

- > Students understood that the study of literature and social science help to evolve better individual and better society.
- ➤ Emerged as a multifaceted personality who is self-dependent; earning his own bread and butter and also creating opportunities to do so.
- ➤ Realized that pursuit of knowledge is a lifelong process and in combination with untiring efforts and positive attitude are necessary qualities for leading a successful life.
- ➤ Knowledge is acquired with facts and figures in the subjects like geography, economics, history and languages, sociology, philosophy, logic, politics and defense study.
- ➤ Basic concept, fundamental principles and various theories are cleared.
- ➤ Understood how literature can provide solutions to the social issues.
- ➤ Gained the analytical ability to analyses critically the literature, social, cultural and political issues.
- ➤ Participation in various social and cultural activities voluntarily.
- ➤ Skills like reading writing speaking are developed to help in expressing ideas and views.

PROGRAMME OUTCOMES (UNDER GRADUATE LEVEL

Bachelor level of Commerce (B.Com)

- Provides the accounting knowledge to our students through they will be doing the job as Account Assistant.
- Understanding the business skill at our graduation level.
- Gives maximum information about Technology.
- Providing a Business Laws, Tax, Audit related knowledge.

Program Outcomes (Science Faculty)

After graduation our students expected to be able to avail:

- 1. Basic knowledge of the subjects studied in science faculty.
- 2. Awareness of basic principles in various science subjects like biology, chemistry, physics, mathematics, etc.
- 3. Pursuit of knowledge and its life long benefit is realized to the students for leading successsful life.
- 4. Understood scientific and fundamental principes and their relevance to daily activities.
- 5. Become expert in handling various equipments and instruments from various laboratories and acquire logical inference.
- 6. Able to draw the proper conclusion and analyse the data systematically.
- 7. Acquire a wide range of thinking and developes novel ideas and solutions to the problems.
- 8. Developes scientific angle with respect to scientific subjects and its relevance to life.
- 9. Acquires ideas of skill enhancement in various activities like reading, speaking effectively, etc.
- 10. Inspired in social activities, humanities, performing arts, etc. develops civilized personality.

DEPARTMENT OF HISTORY (2019-2020)

| | DEPARTMENT OF HISTORY | | | |
|-------|---|--|--|--|
| Class | Course | Outcomes (Students will be able to) | | |
| | | | | |
| | | | | |
| FYBA | HIS DSC- A1 History of India 1857-1950 | Understand modern Indian history | | |
| | | • Identify the importance and the legacy of Freedom Movement. | | |
| | | • Distinguish the detail account of British raj as well as its overall impacts on the Indian society. | | |
| | | • Evaluate the renaissance and social reform movement in India. | | |
| | | • Understand some of the early resistance to British rule. | | |
| | | | | |
| | HIS DSC- A2 History of India 1857-1950 | | | |
| | | • Identify the social institutions of late nineteenth century. | | |
| | | • Understand various phases of the national movement. | | |
| | | • Understand the difference between moderates, extremists and revolutionaries. | | |
| | | • Comprehend the socio-religious scenario and the social reformation. | | |
| | | • Grasp the details of freedom movement under the Mahatma Gandhi"s leadership. | | |
| | | • Understandthe evolutionary processes of constitutional developments. | | |
| | HIS DSC B1 Social Formation and cultural pattern in ancient world | Understand the civilization of ancient world. | | |
| | | to understand the cultural human values in view of history. | | |
| | HIS DSC B1 Social Formation and cultural pattern in ancient world | Understand the civilization of ancient world. | | |
| | | to understand the cultural human values in view of history. | | |
| SYBA | HIS - 231-G-2 Rise of Maratha Power (1630-1674) | | | |
| | | • Explain the reasons behind ChatrapatiShivaji"searly conflicts with the regional lords and the outsiders. | | |
| | | Know about the administrative need and the | | |

| | importance of grand coronation of ChatrapatiShivaj |
|---|---|
| | Asses the ChhatrpatiShivaji"s invasion on Karnataka. |
| HIS- 232 – (B) S1 History of USA (1776-1914) | • Explain the processes of the colonisation of American land. |
| | • Understand the founding principles and ideals propagated by the American Revolution. |
| | • Evaluate the development and the nature American democracy. |
| | • How the American people successfully overcame from the stigma of Slavery and the Civil War. |
| | Describe the policies of US"s President Theodore Roosevelt and President Woodrow Wilson. |
| HIS- 233- S2 History of Ancient India (B.C.3000 - B.C.400) | Perceive various sources to study of Ancient India. |
| | • Know about the development and the achievements of man in the Stone Age. |
| | • Understand the glory of Indian history in the age of Harappan civilization. |
| | Comprehend the history of Vedic period. |
| | • Understand the philosophy of Jainism and Buddism. |
| | Perceive influence of political support on religion. |
| HIS 241 (G-2): Rise of Maratha Power (1674-1707) | • Understand the formation of welfare state during the Maratha rule |
| | • Understandtheindustrial and agricultural aspects of ChhatrpatiShivaji"s regime |
| | • Understand the administrative aspect of the Swarajya. |
| | • Understandthe conflict for throne after the death of ChhatrpatiShivaj |
| | |
| HIS- 242 – B S1 History of USA (1914-1970) | Explain how the America marched towards to become a world power. |
| | Critically assess the importance of the role played by US in the world war-I and world war- |
| | How the America became the world economic power |
| | • Understand the Civil Rights Movement. |
| | • Explain and critique the Indo-US relations. |
| HIS 243 (S-2): History of Ancient India (B.C.400 – A.D. 1206) | Know about the MauryanEmpire. |
| | • Perceive socio-economic, religious situation under the Maurya. |
| | • Understand emergence of feudal system in Indian society |
| | Comprehend about the Gupta period. |

| | | • Understand the History of Satvahanas, Shungas, |
|------|---|--|
| | | Kushans, and Hunas. |
| | | Know about the Sangam age, the Cholas, Pallavas and Chalukyas. |
| | HOC- G -241 : History of Civilization | Understand the civilization of ancient world. |
| | | to understand the human values of civilization in the view of history. |
| | HOC- G - 251: History of Civilization | Understand the civilization of ancient world. |
| | | to understand the human values of civilization in the view of history. |
| TYBA | HIS 351 -G3- History of Modern World (1789-1900) | • Learn about the causes and aftermaths of the French revolution. |
| | | • Understand the rise of Nepolean and how Meternic dominated the European politics. |
| | | |
| | | • Understand the factors responsible for the end of |
| | | monarchy in France.Understand the rise of Nepolean and how Meternic |
| | | dominated the European politics. |
| | | Describe how feudalism came to end In Europe. |
| | | • Describe the historical process which leads to rise of nationalism in Europe. |
| | | • Understandhow industrial revolution encouraged to colonial expansion. |
| | | |
| | HIS 352(B)- S3 - Expansion of the Maratha Power (1707-1761) | • Understand the importance of the Maratha history in 18th century. |
| | | • Asses the circumstances under which rise of the Peshwas took place. |
| | | Understand the political scenario of the Maratha power in the early 18th century |
| | | Understand the policies adopted by early Peshwas. |
| | HIS (S4) 353 History of Sultanate | Understand early difficulties of Sultans in India |
| | (1206-1707). | Grasp territorial expansion of Sultanat Period. |
| | | Understand the administrative setup of Sultanat from central to local level. |
| | | Know the system of trade & commerce during the period of Sultant . |
| | | Understand the nature of village community & the relationship between the different sections of society. |
| | | Understand the aspects of fiscals & monetary system under the Sultanat. |
| - | | Grasp the attitude of emperors towards religion under |

| | the regime of Sultanat. |
|---|---|
| | |
| HIS 361 - G3 - History of Modern World (1901-1945) | • Understand the importance of world peace right after the world war Ist. |
| | Evaluate the Russian revolution and the first |
| | experiment of the communist government. |
| | • Understand the fascism and the rise of dictatorship in |
| | Europe. |
| | • Explain the aftermaths of the World War II on the world politics. |
| | • Understand how Russia and America emerged as |
| | superpowers on the verge of cold war. |
| HIS 362(B) -S3- Expansion and fall of the Maratha Power (1761-1818) | |
| | • Explain the circumstances of the Maratha power after the battle of Panipat. |
| | Knowthe reasons of political disintegration of the |
| | Marathas. |
| | Understandthe nature of Aglo-Maratha relations. |
| | Understandthe central and provincial administration |
| | of Marathas under the Peshwas. |
| HIS (S4) 363 History of Mughal | • Understand the political situation of India on the eve |
| (1526-1707) | of Babar's invasion. |
| | Grasp territorial expansion of Mughal empire |
| | • Understand the emergence & consolidation of Sher Shah. |
| | • Grasp the Mughal concept at divine theory of kingship & state |
| | • Understand the administrative set up of Mughals. |
| | Comprehend the basic features of Mansabdari& |
| | change in it during 17th century. |
| | • Know the system of trade & commerce during the period of Mughals. |
| | Understand the nature of village community. |
| | • Grasp the some aspects of fiscals & monetary system of Mughals. |
| HOC- G -251 : History of Civilization | Understand the civilization of ancient world. |
| | to understand the human values of civilization in the view of history. |
| HOC- G -261 : History of Civilization | Understand the civilization of ancient world. |
| | to understand the human values of civilization in the view of history. |

DEPARTMENT OF MARATHI (2019-2020)

| Class | Course | Outcomes(Student will be able to) | | |
|---------------------|---|---|--|--|
| F.Y.B.A Sem: I | MAR-G-111(A) Vishistha VanganayPrakar Abhyas - Katha | Katha Swarup VaisistheKathechi GhatakKatheche PrakarKathechi Vatchal | | |
| F.Y.B.A Sem :II | MAR-G-121(A) Vishistha VanganayPrakar Abhyas - Kavita | Kavita – Swarup va vasisthye Kaviteche Ghatak Kaviteche Prakar Kaviteche Vatchal | | |
| S.Y.B.A Sem :III | MAR-G-231 (A) VangmayPrakarKadambari | KadambarichiOlakha KadambarichiPrerana KadambaricheGhatak- Prakar KadambaricheVatcha | | |
| | MAR-S1-232 : MadhyauginGadhyaVangmay Prakar | ShivkalinSwarajyaNiti SwarajyaNitisathiAdanyapatracheMahat va LokkalyankariYojanachaMadhauginRaj yakartayanchiNiti | | |
| | MAR- S2_233: SahityaVicharSwarup | BhartiyavaIngrajitilSahaityaSankalpana SahaityacheSwarup PrayojanvaNirmitiPrakriya SahityacheVividhaPrakar | | |
| S.Y.B.A Sem :IV | MAR-G-241 (A) VangmayPrakarAtmakathan | MarathitilAtmacharitra AtmakathanSwarup AtmakathanacheSwarupVaVaishitye AtmakathacheVegalepan | | |
| | MAR-S1-242 : MadhyauginPadhyaVangmayP rakar | MadhyauginPadhyaVangmayParichay SantavangmayachiPerana SantavanmayachiSwarup SantanchiAdhytaimik | | |
| | MAR- S2-233: SahityaVicharSwarup | BhartiyavaIngrajitilSahaityaSankalpanaSahaityacheSwarup | | |

| | | PrayojanvaNirmitiPrakriyaSahityacheVividhaPrakar |
|---------------------|---|---|
| | MAR- 243: SathityaSwarupVichar | SahityachiBhashya v Mulye Akalan, Ashwad v sanskar VangamayinAbhiruchi PradeshikSahitya |
| T.Y.B.A Sem:V | MAR-G- VangmayPrakarNatak | NatakacheSwarupNatakacheGhatakNatakachePrakarSukhatmikavaSokatmikaparichay |
| | MAR-S3: Adhunik Marathi VangmayachaEtyahas(1920- 1960) | Katha VangmayachaParichaya Katha karanchaAbhyas VangmayPravahanchaParichaya ParmukhaLekhakkaryaVaParichaya |
| | MAR-S4: BhashyaVidnyanva Marathi Vayakran | BhashyaSwarup, Karya Swan Nirmitivakarya Swanimasnkalpana Marathi VyakranatilPramukhaGhatak |
| T.Y.B.A Sem VI | MAR-G- SahityaAkadamiPuruskrutLek hakancheLalitGadhya | LalitGadhyaSwarup LalitGadhyaParmpara LalitgadhyatilAnubhav, Swedana, sangharshya |
| | MAR-S3: Adhunik Marathi Vangmayachaetyahas (KavitavaNatak) | 1920-60 Kavitasthulparichay 1920-60 KavinchaParichaya 1920-60 Nataksthulparichay 1920-60 NatakParichaya |
| | MAR- S4: Marathi Vyakaran | VyakaranKaryaSabdanchyaJatiBhashecheGhatak |
| F.Y.B.Com Sem I | MAR –G- vangmayParakarLalitGadhya | LalitgadhyaMahanjekay LalitGadhyacheGhatak LalitGadhyachePrakar LalitGadhyatilBadal |
| F.Y.B.Com Sem II | MAR –G- LekanVaSanwadKaushalyPari chay | LekahnKaushalyMhanje KayLekhanKaushalya – TantraLekanAviskarchePrakar |
| S.Y.B.Sc Sem III | MAR-G-231Lalit Vangmay - Vidanyan | CharitraMahanje KayCharitracheKhatak |

| | | CharitracheParakarCharitrachaPrerna |
|--------------------|------------------------|---|
| S.Y.B.Sc Sem IV | MAR-G-214 LalitVangmay | Natak – sankalpanavaVyakhya NatakacheGhatak NatkachePrakar NatkachaEtyahas |

DEPARTMENT OF ENGLISH (2019-2020)

| Class | Course | Outcomes |
|--------|--|--|
| FYBCom | COMPULSORY | • The students could express themselves in oral and |
| | ENGLISH | written communicative situations. |
| | | • The students could communicate effectively in their various business situations. |
| | | • The verbal and non-verbal skills of communication are developed. |
| FYBA | COMPULSORY ENGLISH | • Students use the values learnt through literary works. |
| | | The Students should express their thoghts in English. |
| | OPTIONAL ENGLISH | Development of the comprehensive ability of students. |
| | | • Inculcation of moral and human values among students. |
| | | • Understanding of the basic forms of poetry. |
| SYBA | COMPULSORY | The students! literary tendencies are developed |
| SIDA | ENGLISH | The students' literary tendencies are developed. |
| | | • The students could express themselves in oral and written communicative situations. |
| | | The students could improve vocabulary. |
| | | • The students are able to use English effectively in formal and informal situations of life. |
| | General Paper -2 | • The students are able to appreciate literature critically. |
| | (Introduction to Study of English Language and Literature) | The students could use their creative and critical faculties of mind in real life situations. |
| | | • The learners are able to apply the science of pronunciation and oral form of English language. |
| | | • The students use literature to develop their social and moral sense in life. |
| | | |

| | ENGLISH Special Paper -I | • The students learn to correlate literature to sociopolitical conditions of its time. | | |
|-------|------------------------------|---|--|--|
| | | The students are able to use their creative and critical faculties of mind in real life situations. The learners could implement the values of literature in life. | | |
| | | | | |
| | ENGLISH Special Paper -II | Students could learn Language through literature. | | |
| | | • The syllabus can implement the values of literature in life. | | |
| | | • Students know the culture of the times. | | |
| TYBA | Compulsory English | • The students understand the basic concept of literary genre, poem, prose and stories. | | |
| | | • To help the students to develop literary abilities. | | |
| | | • The students' communicative skills are developed. | | |
| | Special English-G-III | • The students learn the origin of drama and dramatic art. | | |
| | | • The students learn the aspects and genres of drama. | | |
| | Special Paper-III | The students develop the critical understanding literature. | | |
| | | • The students are exposed to Indian writing in English and American literature. | | |
| | | • The students are exposed to social, political and cultural background. | | |
| | Special Paper-IV | • The students understand the properties and functions of language. | | |
| | | • Inculcation of phonological competence among students. | | |
| | | • The students are acquainted with English grammatical forms and functions. | | |
| | | The students are acquainted with morphological concepts and processes. | | |
| SYBSC | ENGLISH | The students should aware the lives of great businessmen of the century. | | |
| | | The students will implement things, they learn in course | | |

| | DEP. | ARTMENT OF HINDI | (2019-2020) | |
|--------------------|--------------------|---|--|---|
| Class | Suject Code | Course Title | Objectives | Outcomes(Students will be able to) |
| F.Y.B.A. (CBCS) | HIN- A-1 | Hindi kahani | Hindi kahanividhaseparichitka rana, Bhashikkshamataviksitk arana | Hindi kahanividhaseparich itkarvakarmanviym ulyonkepratiasthanir mankarana |
| | DSC HIN A2 | Hindi Kavita | Hindi kavya se parichitkarana, kavyaketattvasamajhana | Hindi kavyakopadhakarma nviybhavonkojagrat karana |
| S.Y.B.A. | Hin-231 – A G-3 | Hindi Samanya | Chhatronkokahanividha evmkhandkavya se parichitkarana | kahanividhaevmkha ndkavyaketattvonko samjhana |
| | Hin-232 (S-1) | Hindi Vishesh-1 (kavyashashtra) | Kavyashashtrakasaman yaghyankarana | Kavyaevamgadyake tattvonseparichitkar ana |
| | Hin-233(S-2) | Hindi Vishesh-2 (Upanyas, vidha) | UpanyasevamNatakvidh aonkivisheshtaonkosamj hana | UpanyasevamNatak vidhaonkekemadhya msemanvimulyonke pratiasthanirmankar ana |
| | Hin-241 A G-4 | Hindi Samanya | Khandkavya se parichitkarana | Kurukshetrakavyak opadhkaryuddhkibhi shanatakosamajhana |
| | Hin-242 (S-3) | Hindi Vishesh-1 (kavyashashtra) | Kavyashashtrakasaman yaghyankarana | Kavyaevamgadyake tattvonseparichitkar ana |
| | Hin-243(S-4) | Hindi Vishesh-2 (Natakvidha) | Natakvidhakosamjhana | Natakvidhakemadhy amsemanvimulyonk epratiasthanirmanka rana |
| T.Y.B.A. | Hin-351 A | Hindi Samanya (G-3) | EkankievamNibandhvid haseparichitkarana | EkankievamNiband hvidhakivesheshtao nkosamjhana |
| | Hin-352 | Hindi sahityakaitihas (S- 3) | Hindi sahitya se parichithona | Hindi sahityakevibhinnkal onkigatividhiyonkos amajhana |
| | Hin-353 | Bhashavigyantathar ashtrabhashaandola Nkaitihas | Bhashavigyakemadhya msebhashakibarikiyonk osajhana | Dhvani, shabd, vakyaevamarthkisth itikosamajhana |
| | Hin-361 A | Hindi Samanya (G-3) | EkankievamNibandhvid haseparichitkarana | EkankievamNiband hvidhakivesheshtao nkosamjhana |
| | Hin-362 | Hindi sahityakaitihas (S- 3) | Hindi sahitya se parichithona | Hindi sahityakevibhinnkal onkigatividhiyonkos amajhana |
| | Hin-363 | Bhashavigyantathar | Bhashavigyakemadhya | Dhvani, shabd, |

| | ashtrabhashaandola nkaitihas | msebhashakibarikiyonk osajhana | vakyaevamarthkisth itikosamajhana |
|-----------------------------|---|---|--|
| Prasnpatra-1 Hin-0111 | Samanyastar- kathasahitya | Adunikkathasahitya separichithona | Adunikkathasahitya se parichitkarakarkatha sahityakeprati ruche nirmankarana |
| Prasnpatra-2 Hin-0112 | Vishashstar- AdikalinevamBhak tikalinkavya | Adikalinevambhaktikali nkavya se parichitkarana | Adikalinevambhakti kalinkavya se parichitkarakardono kepravruttiyonkosa majhana |
| Prasnpatra-3 Hin-0113 | Vishashstar- Bhartiyevampaschh atyakavyashastratat haalochana | Bhartiyevampaschhatya kavyashastratathaalocha nakosamajhana | Bhartiyevampaschh atyakavyashastratat haalochanakosamaj hakarkavyshashtrak evibhinnasiddhanto nkosamajhana |
| Prasnpatra-4 Hin-0114(A) | Visheshstar- vaikalpik- Visheshsahityakar- Kabirdas | kabirdaskesahityakosam ajhana | Kabirdaskesahityak osamajhakarunkeka vyakivishashtaonko samajhana |
| Prasnpatra-5 Hin-0121 | Samanyastar- kathetargadyavidha Yein | Kathetargadyavidhaons eparichithona | Kathetargadyavidha onseparichithokarun ketattonkejanana |
| Prasnpatra-6 Hin-0122 | Vishashstar- Ritikalinkavya | Ritikalinkavya se parichitkarana | ritikalinkavyakivish eshtaonkosamajhana |
| Prasnpatra-7 Hin-0123 | Vishashstar- Bhartiyevampaschh atyakavyashastratat Haalochana | Bhartiyevampaschhatya kavyashastratathaalocha nakosamajhana | Pashchhatyakavyash ashtrakevividhsiddh antonevamvadhonk osamajhana |
| Prasnpatra-8 Hin-0124(A) | Visheshstar- vaikalpik- Adivasivimarsh | Adivasisahityakosamajh ana | Adivasisahityakosa majhakaruskivishas htaonkosamajhana |
| Prashnpatra-9 Hin-2310 | Samanyastar – mahakavyaaurkhan dkavya | Mahakavyaaurkhandkav yakipravrittiyonseparich itkarana | Mahakavyaaurkhan dkavyakeswarupkos amajhkarunkiveshes htaonkojanana |
| Prashnpatra-10 Hin-2320 | Vishashstar – Bhashavigyan | Bhashavigyankesiddhan tonkosamjhana | Bhashavigyanpramu khangontathaucchar anprakriyakosamajh ana |
| Prashnpatra-11 Hin-2330 | Vishashstar- Hindi sahityakaaadievam madhyakal | Hindi sahityakeaadievammadh yakalkosamajhana | Hindi sahitya kea di evammadhykalkosa majhana, vibhinnasahitykaron separichithonaevam unkisahityikpravrutt iyonkosamajhana Patrakaritaitihas, |
| | Prasnpatra-2 Hin-0112 Prasnpatra-3 Hin-0113 Prasnpatra-4 Hin-0114(A) Prasnpatra-5 Hin-0121 Prasnpatra-6 Hin-0122 Prasnpatra-7 Hin-0123 Prasnpatra-7 Hin-0123 Prashnpatra-9 Hin-2310 Prashnpatra-10 Hin-2320 Prashnpatra-11 | Prasnpatra-1 Hin-0111 Prasnpatra-2 Hin-0112 Prasnpatra-3 Hin-0113 Prasnpatra-4 Hin-0114(A) Prasnpatra-5 Hin-0121 Prasnpatra-6 Hin-0122 Prasnpatra-7 Hin-0123 Prasnpatra-7 Hin-0123 Prasnpatra-8 Hin-0124(A) Prasnpatra-8 Hin-0124(A) Prasnpatra-9 Hin-2310 Prashnpatra-10 Hin-2320 Prashnpatra-10 Prashnpatra-10 Hin-2330 Prashnpatra-11 Hin-2330 Vishashstar- Kabirdas Vishashstar- Ritikalinkavya Vishashstar- Min-0124(A) Vishashstar- Malaochana Prashnpatra-9 Hin-2310 Vishashstar- Malaochana Vishashstar- Malaochana Vishashstar- Min-0124(A) Vishashstar- Malaochana Vishashstar- Min-2310 Vishashstar- Mahakavyaaurkhan Mavya | Prasnpatra-1 Hin-0111 Prasnpatra-2 Hin-0112 Prasnpatra-2 Hin-0113 Prasnpatra-3 Hin-0113 Prasnpatra-4 Hin-0114(A) Prasnpatra-5 Hin-0121 Prasnpatra-6 Hin-0122 Prasnpatra-7 Hin-0123 Prasnpatra-7 Hin-0123 Prasnpatra-7 Hin-0123 Prasnpatra-8 Prasnpatra-7 Hin-0124(A) Prasnpatra-1 Bhartiyevampaschh atyakavyashastratat haalochana Examayastar- Kabirdas Examayastar- Kabirdas Exathetargadyavidha yein Prasnpatra-6 Hin-0122 Prasnpatra-7 Hin-0123 Prasnpatra-7 Hin-0123 Prasnpatra-8 Hin-0124(A) Prasnpatra-8 Hin-0124(A) Prasnpatra-9 Hin-2310 Prashnpatra-9 Hin-2320 Prashnpatra-10 Hin-2320 Prashnpatra-11 Hin-2330 Vishashstar- Ritikalinkavya Ritikalinkavy |

| | Hin-234 0 (C) Prashnpatra-12 | vaikalpik-Hindi patrakarita | paribhasha, mahattvaevamvyaptikos amajhana | vyapti, avashyakata, visheshtayeinadisep arichithona |
|---------------------|---------------------------------|--|--|--|
| | Prashanpatra -13 Hin-2410 | Samanyastar – kavyanatak, naikavita, gazal | kavyanatak, naikavita, gazalkeswarupkosamajh ana | kavyanatak, naikavita, gazalkeswarupkosa majhkarunketattvon aurvisheshtaonkojan ana |
| | Prashanptra -14 Hin-2420 | Vishashstar – Hindi Bhasha | Hinibhasha, itihas, adhunikrup, boliyonkosamajhana | Hindi bhashyakeswrupkov istrutrupsesamajhan a |
| | Prashanpatra-15 Hin-2430 | Vishashstar- Hindi sahityakaadhunikka 1 | Hindi sahityakeadhunikkalkos amajhana | Hindi sahityakeadhunikkal separichithonaevam unkisahityikpravrutt iyonkosamajhana |
| | Prashanpatra-16 Hin-2440 (C) | Vishashstar- vaikalpik- Anuvadvigyan | Anuvadswaruo, paribhasha, mahattvaevamvyaptikos amajhana | Anuvadkabhashavai gyanikpakshaevama nuvadkshamatakavi kaskarana |
| F.Y.B.Sc. (CBCS) | AEC HIN - C | Bhashiksampreshan aursahitya | Hindi bhasha, sampreshankaswarup, sampreshankeprakar, hindivyangyasahityaadi kosamajhana | Hindi bhashatathasahityak isamyakjankari, bhashakivyavhariku pyogitakosamajhana |
| F.Y.B.com (CBCS) | Hin (102-C) (811023) | Hindi samanya (Udyogpatiyonkapa richay) | Bharat kemahanudyogpatiyonk akaparichaypraptkarana | Mahan udyogpatiyonkapari chaypraptkarakeprer ana graham karana |

DEPARTMENT OF ECONOMICS (2019-2020)

| FYBA | Eco G-101(A) - | Students will be aware about fundamental concepts of |
|------|-----------------|--|
| | Fundamentals of | economics |
| | Economics-I | Students will be able to understand |
| | | economic approach |
| | | Students will be able to know role of market |
| | | in real life. |
| | | • Students will be able to understand role & |
| | | activities of financial institutions. |
| | Eco G-201(A) - | Students will be aware about various forms |
| | Fundamentals of | of market |
| | Economics-II | Students will be able to understand concept |

| | | of cashless society |
|------|------------------------|--|
| | | • |
| | | • Students will be able to understand BOT, |
| | | BOP & type of exchange rates. |
| | | • Students will be able to understand concept |
| | 777 | of govt. financing |
| SYBA | ECO 231- Indian | Students will be able to understand nature of |
| | Economysince 1980 – | Indian economy |
| | I | • Students will be able to understand |
| | | population & economic development |
| | | • Students will be able to understand |
| | | infrastructure and economic development |
| | | Students will be able to understand role of |
| | | agriculture in Indian economy |
| | ECO 241 - Indian | Students will be able to understand industrial |
| | Economysince 1980 – | sector in India |
| | II | Students will be able to understand |
| | | cooperative sector in economy |
| | | • Students will be able to understand |
| | | economic planning in India |
| | | • Students will be able to understand recent |
| | | structural changes in economy |
| | ECO 232- Advanced | To understand individual agents of market |
| | MicroEconomics – I | • Students will be able to understand |
| | | consumer behaviour |
| | | • Students will be able to understand concept |
| | | of cost |
| | | • Students will be able to understand Linear & |
| | | Non- Linear functional relationship |
| | ECO 242- Advanced | Students will be able to understand price |
| | MicroEconomics – II | determination of factors |
| | | • Students will be able to understand various |
| | | theories of factors |
| | | • Students will be able to understand concept |
| | | of profit & Interest |
| | | • Students will be able to understand market |
| | | equilibrium of firm in monopolistic market. |
| | ECO 233- Advanced | Students will be able to understand macro |
| | MacroEconomics – I | economic analysis |
| | Wideroff Continues – 1 | Able to understand of national income |
| | | |
| | | Able to understand classical & Keynesian theories of output and employment |
| | | |
| | | • Able to understand consumption & Investment function |
| | ECO 242 | |
| | ECO 243- | • Students will be able to understand process |
| | Advanced Macro | of credit creation by commercial banks |
| | Economics – II | Students will be able to understand Quantity |

| TYBA | ECO 351 - Indian Economy since 1980 - III | theory of money. • Students will be able to understand various macroeconomic problems. • Students will be able to understand various macroeconomic policy • Students will be able to understand Indian financial system • Students will be able to understand money & banking • Students will be able to understand India's foreign trade • Students will be able to understand concept of globalization | |
|------------|--|--|--|
| | ECO 361-Indian Economysince 1980 – IV | Students will be able to understand federal fiancé in India Students will be able to understand Indian tax system Students will be able to understand public expenditure in India Students will be able to understand public debt& deficit finance | |
| | ECo-362(B) - Economics of Indian Agriculture-II | Students will be able to understand international capital movements & MNCs Students will be able to understand international instructions & regional economic cooperation Students will be able to understand concept of devaluation & convertibility of rupees Students will be able to understand Euro currency market | |
| F.Y.B.COM | Micro Economics | To understand the concepts of of micro economics concepts Demand & Supply Analysis To understand the theory of production and production cost analysis. To understand the concept market types. | |
| S.Y.B.COM | Macro Economics | 1 11 | |
| T.Y.B.C OM | Indian Economics Scenario(1980- 81) | To acquaint students with new concept of Economics. To update the students about new changes brought in Indian Economy To know the relevance economic practices in modern competitive world. To make student competent to become success in competitive | |

DEPARTMENT OF BOTANY (2019-20)

| Acad emic Year | Class | Se m | Subject Code | Course Title | Objectives |
|----------------------|---------------|----------------|-----------------|--------------------------------------|---|
| 2019- | F.Y. | Se | BOT- | P- I- Microbial diversity | 1. To know scope and importance |
| 20 | 0 B.SC m- 101 | | 101 | Algae & fungi | of the discipline. |
| | | | BOT- 102 | P-II- Plant Taxonomy | 2. To study plant communities and ecological adaptations |
| | | | BOT - 103 | Practical | |
| | | Se m- II | BOT- 201 | P-I- Diversity of Archigoniates | in plants. |
| | | | BOT- 202 | P-II - Plant ecology | 3. To know about conservation of biodiversity. |
| | | | BOT- 203 | Practical | 4. To study the botanical regions of India and vegetation |
| | | | | | types of Maharashtra. |
| 2019- 20 | S.Y.B .SC | Se m - I | BOT- 231 | P- I - Bryophytes & Pteridophytes | |
| | | | BOT- 232 | P-II - Morphology of Angiosperm | 2.To study various tissue systems |
| | | Se m- II | BOT- 241 | P-I- Plant Physiology | 3.To know primary structure of dicot and monocot plants |
| | | | BOT - 242 | P-II - Taxonomy of Angiosperm | 4.To study normal secondary growth in plants and their causes |
| | | | BOT - 233 | Practical | 5.To study protective tissue system |
| | | | BOT - 243 | Practical | |
| | | | BOT - SEC | Mushroom cultivation | |
| | T.Y. B.SC | Se m - I | BOT - 351 | P- I -Cryptogames-I | |

| 2019- | | BOT - | P-II - Angioserm & | 1.To know the scope and |
|-------|-----------|--------------|----------------------------------|--|
| 20 | | 352 | Taxonomy | Importance of Embryology |
| | | BOT - | P-III - Cell & Molecular | 2.To study structure of micro and |
| | | 353 | Biology | mega sporangium. |
| | | BOT - | P-IV - Advanced plant | 3.To study pollination, fertilization, |
| | | 354 | Physiology | Endosperm and Embryogeny. |
| | | BOT - | P-V - Plant Ecology & | 4. To give exposure of techniques in |
| | | 355 | Phytogeography | embryology |
| | | BOT - | P-VI - Ethanobotany | |
| | | 356.2 | | |
| | | BOT - | Practical | |
| | | 357 | | |
| | | BOT - | Practical | |
| | | 358 | | |
| | | BOT - | Practical | |
| | | 359 | | |
| | Se | BOT - | P- I - Gymnoserm & Paleo | |
| | m - II | 361 | Botany | |
| | | BOT - | P-II - Anatomy Embryology | |
| | | 362 | | |
| | | BOT - | P-III - Genetic plant | |
| | | 363 | Breeding & Evaloution | |
| | | BOT - | P-IV - Plant Biotechnology | |
| | | 364 | | |
| | | BOT - | P-V - Applied Botany | |
| | | 365 | | |
| | | BOT - | P-VI - Medico botany & | |
| | | 366.2 | Pharmacougnosy | |
| | | BOT - | P-I (Pract) (I & III) | |
| | | 367 | | |
| | | BOT - | P-II (Pract)(II & IV) | |
| | | 368 | | |
| | | BOT - 369 | P-III (Pract) (V & VI) | |

| Year | MS.c. PartI | i)To study the important fossil types in |
|---------|---|---|
| 2019-20 | Semester-I | different groups of plants and Indian |
| | BOT.101 Angiosperm Taxonomy | fossil records. |
| | BOT.102 Environmental Botany and | ii) To understand the application and |
| | Biostatistics | importance of plant tissue culture and |
| | BOT.103 Cytogenetics, and Molecular Biology | transgenic plant in the field of botany. |
| | BOT.104 Practical –I (Based on BOT.101) | iii) To study transgenic technology for the |
| | BOT.105 Practical -II (Based on BOT.102 and | improvement of quality and quantity of |
| | BOT.103) | Plant and there by product. |
| | Semester-II | iv) To reveal historical development in |
| | BOT.201 Diversity of Lower Cryptogams | mycology. |
| | BOT.202 Diversity of Higher Cryptogams | |
| | BOT.203 Plant Physiology and Biochemistry | |
| | BOT.204 Practical –I (Based on BOT.201) | |

BOT.205 Practical -II (Based on BOT.202 and BOT.203) MS.c. PartII **SEMESTER - III** BOT. - 301: Gymnosperm and Palaeobotany BOT. - 302: Plant Biotechnology and Bioinformatics BOT. - 332: Mycology and Plant Pathology Special paper - I BOT. - 304: Practical - I (Based on Bot. - 301 & 302) BOT. - 305: Practical - II (Based on Bot. - 331 / 332 / 333/ 334) **SEMESTER - IV** BOT. - 401: Developmental Botany BOT. - 422: Mycology and Plant Pathology Special paper – II BOT. - 432: Mycology and Plant Pathology Special paper – III BOT. - 404: Practical – I (Based on Bot. – 401 BOT. - 405: Practical – II (Based on Bot. – 421 & 431 /Bot. – 422 & 432 / Bot. 423 & 433 / Bot. – 424 & 434) BOT. - 406: Project work.

DEPARTMENT OF ZOOLOGY (2019-20)

| Academic | Class | Course title | Objective | Outcome |
|-----------|----------|-----------------|------------------|---------------------------------------|
| Year | | | | |
| 2019 - 20 | F.Y.B.Sc | P-I Animal | To study about | Students get knowledge and |
| | sem-I | diversity I | different | information of invertebrates, types |
| | | • | invertebrate | and its importance. |
| | | | animals | |
| | | P-II Animal | To study about | Students get knowledge and |
| | | Diversity II | different | information of vertebrates, types and |
| | | | vertebrate | its importance. |
| | | | animals | |
| | | P-III Zoo | Practical | Students get knowledge and |
| | | Practical | awareness of | information of practical applications |
| | | | subject | of subject. |
| | | | knowledge. | - |
| | Sem-II | P-I Comparative | To study about | Students get knowledge and |

| | anatomy of vertebrate | comparative anatomy of different vertebrate animals | information of comparative anatomy and importance. |
|--------------------|---|--|--|
| | P-II Developmental biology of vertebrate | To study about different development stages of vertebrate embryo | Students get knowledge and information of development stages and importance. |
| | P-III Zoo 203 Practical | Practical awareness of subject knowledge. | Students get knowledge and information of practical applications of subject. |
| S.Y.B.Sc. Sem I | P-I Zoo 231 Non-chordate II | To study about invertebrates | Students get knowledge and information of invertebrates, types and importance. |
| | P-II Zoo 232 Medical Zoology | To study about medical importance of animals | Students get knowledge and information of medicinal values of animals and their economic importance. |
| | P-III Zoo-233 Practicals | To study the practical applications of subject. | Students get knowledge and information of practical applications of subject. |
| Sem II | P-I Zoo-241 Choradates II | To study about chordate | Studentsget knowledge and information of Chordates and their uses. |
| | P-II Zoo-242 Applied Zoology | To enhance the knowledge of Bees | Students get knowledge and information of Bees |
| | P-III Zoo-243 Practical | Practical awareness of subject knowledge. | Students get knowledge and information of practical applications of various principles of the subject. |
| T.Y.B.Sc. | | | |
| SEM I | P-I Zoo 351 Non chordate III | To study about Leech | Students get knowledge and information of leech, types and importance. |
| | P-II Zoo 352 Cell & Molecular biology | To study about cell and its structure and molecular& its basis | Students get knowledge and information of cell, its types and importance. |
| | P-III Zoo 353 Mammalian histology & Physiology I | To study about mammalian tissue and its function | Students get knowledge and information of mammalian histology and its function |

| | P-IV Zoo 354 Biochemistry | Biochemical study of protein, lipid carbohydrate etc. | Students get knowledge and information of biochemical molecules study and its function |
|--------|--|---|---|
| | P-V Zoo 355 Systematic, Evolution & Paleontology | Study of evolution & fossil | Students get knowledge and information of evolution fossil and its function |
| | P-VI Zoo 356 Biotechnology | Study of principal of biotechnology | Students get knowledge and information of biotechnological principal |
| | Prac-I Zoo 357 Related to 351 & 353 | Practical awareness of subject knowledge. | Students get knowledge and information of practical applications of subject. |
| | Prac-II Zoo 358 related to 352 & 355 | Practical awareness of subject knowledge. | Students get knowledge and information of practical applications of subject. |
| | Prac-III Zoo 359 Related to 354 &356 | Practical awareness of subject knowledge. | Students get knowledge and information of practical applications of subject. |
| Sem II | P-I Zoo 361 | Study of | Students get knowledge and |
| | Chordates III | Scoliodon& its study | information of vertebrates, types and importance. |
| | Chordates III P-II Zoo 362 General Embryology | Scoliodon& its | information of vertebrates, types and |
| | P-II Zoo 362 General | Scoliodon& its study Study of gametes, | information of vertebrates, types and importance. Students get knowledge and information of gametes, fertilization, |
| | P-II Zoo 362 General Embryology P-III Zoo 363 Mammalian Histology & Physiology P-IV Zoo 364 Research Methodology | Scoliodon& its study Study of gametes, fertilization etc. To study about mammalian tissue and its function How the research are done and methods of data analysis | information of vertebrates, types and importance. Students get knowledge and information of gametes, fertilization, its types and importance. Students get knowledge and information of mammalian histology and its function Students get knowledge and information of research, research design, sampling etc |
| | P-II Zoo 362 General Embryology P-III Zoo 363 Mammalian Histology & Physiology P-IV Zoo 364 Research | Scoliodon& its study Study of gametes, fertilization etc. To study about mammalian tissue and its function How the research are done and methods of data | information of vertebrates, types and importance. Students get knowledge and information of gametes, fertilization, its types and importance. Students get knowledge and information of mammalian histology and its function Students get knowledge and information of research, research |

| Prac I Zoo 367 related to 361 &363 | Practical awareness of subject knowledge. | Students get knowledge and information of practical applications of subject. |
|---|--|--|
| Prac II Zoo 368 related to 362 &365 | Practical awareness of subject knowledge. | Students get knowledge and information of practical applications of subject. |
| Prac III related to 364, 366 & project work | Practical awareness of subject knowledge. | Students get knowledge and information of practical applications of subject. |

DEPARTMENT OF CHEMISTRY (2019-2020)

| | | Chemistry |
|----------|---|--|
| Class | Course | Outcomes (Students will be able to) |
| | | |
| | | |
| FY B.Sc. | CH-111: Physical and Inorganic Chemistry | Develop an ability to use conceptual and mathematical tools to express and predict atomic and molecular behavior |
| | | • Predict atomic structure, chemical bonding or molecular geometry based on accepted models. |
| | | • Convert scientific equation in straight line to get physical parameter for slope and intercept. |
| | | Understand deviation of real gas from ideal behavior. |
| | | Understand critical constant and vanderwall"s constant. |
| | | |
| | CH-112: Organic and Inorganic Chemistry | Understand the general properties of organic compounds, applications of organic compounds. |
| | | Understand the Mono functional compounds - Common and IUPAC nomenclature of various type of organic compound. Understand the the alkane by many organic reaction. |
| | | Understand of S- block Elements of alkali metals and Alkaline earth metals |
| | | Understand Arrhenius theory, Bronsted- Lowry theory, and Lewis theory. |
| _ | | Understand ionic product of water, Buffer solutions. |
| | | |

| | CH-113: | |
|---------|---|--|
| | Chemistry | |
| | Practical | |
| | | • Understand the determination of heat of solution, equivalent weight, surface tension etc. |
| | | Carry out qualitative analysis of acidic and basic radicals. |
| | | Learn the applications of types of titrations for various estimations |
| | CH-121: Physical and Inorganic Chemistry | Identify methods and instruments that can be used to study chemistry |
| | • | Evaluate data generated by experimental methods for chemical characterization. |
| | | Carry out quantitative analysis by volumetric method |
| | | To understand specific and equivalent conductance. |
| | | • To understand cell constant and use of it to obtain specific and equivalent conductance. |
| | | • To know Kolhaurash"s law and application of it. |
| | | CH-122: Organic and Inorganic Chemistry |
| | | • understand the preparations, reactions and properties of Monohalogen and Dihalogen derivatives of Alkane. |
| | | • understand the preparations, reactions and properties of Alcohol, Ether and Epoxide. |
| | | understand the preparations and reactions of carbonyl group. |
| | | understand the preparation of carboxylic acids. |
| | | determine the Molecular weight, formula weight, equivalent weight of organic compounds. |
| | | Understand the Electronic structures, size of atoms and ions, ionization energy, metallic and nonmetallic of p block elements. |
| | | |
| | CH-123: Chemistry Practical | |
| | | Carry out quantitative analysis by instrumental method using Conductometer. |
| | | • estimate of aniline / phenol. |
| | | Perform qualitative analysis of organic compounds. |
| | | Carry out quantitative analysis by volumetric method and gravimetric methods |
| SY B.Sc | | |
| | CH 231: Physical and inorganic chemistry | Understand the Electronic structures, size of atoms and ions, ionization energy, metallic and nonmetallic of d block elements. |
| | - J | Understand concept of Helmolthz free energy |
| | | Understand numerical calculations of Gibbs free energy. |

| | Understand concept of vapor pressure of liquids. | |
|---|--|--|
| | Understand the concept of physical properties of metals | |
| | Learn methods of purification of ores. | |
| CH 232: | Review the concept of isomers and discuss the isomer which results from | |
| Organic and analytical chemistry: | free rotation of C-C single bond, from a chirallity, from restricted rotation, R, S and E, Z nomenclature. | |
| | Study of amines their formation reactivity. | |
| | • Study of reactivity, preparation and reactions of organo Li, Cu, Zn compounds. | |
| | • Understand the importance of analytical chemistry in analysis of compounds by titrimetric, gravimetric and instrumental methods. | |
| | • Know the importance of sampling methods and ways of interpretation of results of analysis. | |
| | Determine the causes of errors and their minimization during analysis | |
| | • Learn the application of types of titrations for quantitative analysis of the samples. | |
| CH 233: Chemistry practical: | Understand techniques chromatography for separation of components in the mixture. | |
| | Understand recrystallization for purification of organic compounds. | |
| | Prepare various inorganic complexes. | |
| | analyse compounds by titrimetric, gravimetric and instrumental methods | |
| | Understand to determine thermodynamic parameter. | |
| CH 241 Physical and inorganic chemistry | Understand colligative properties and its application calculation of molecular weight of solutes | |
| | Understand concept of electromotive force and its measurement | |
| | Understand about properties of Lanthanides and actinides. | |
| | • Understand concept of s-s, s-p, p-p, p-d & d-d combination of orbitals. | |
| | Understand about classification of electrodes. | |
| | CH 242: Organic and analytical chemistry | |
| | • Understand the synthesis and reaction of 5, 6 member and condensed heterocyclic systems. | |
| | • Understand the synthesis of synthetic reagents and their synthetic utility. | |
| | • Know the mechanism and stereochemistry of E1, E2 reaction. | |
| | • Understand the concept of quantitative analysis by gravimetric methos. | |
| | • Understand the concept for separation of analytes in samples by thin layer, paper and column chromatographic methods. | |

| | CH 243: chemistry practical: | Carry out qualitative analysis of organic compounds. |
|----------|------------------------------------|--|
| | | Determine molecular weight by depression of freezing point method. |
| | | Handle landsbergers apparatus for determination of molecular weight. |
| | | Estimate of Nickel and Barium gravimetrically. |
| | | Make use of potentiometer for determination of standard electrode potential. |
| T.Y.B.Sc | CH 351: | Understand spontaneous and non spontaneous processes. |
| • | Physical chemistry | |
| | | Understand the importance of salt bridge in electrochemical cell. |
| | | Understand the concept electrochemical cell and determination of potential of cell |
| | | • Understand the laws of photochemistry (Grothus Draper Law and Stark Einstein law) |
| | | Understand the concept quantum yield and fluoresce and phosphorescence from Jalblonski diagram. |
| | | • Understand the various devices to measure the radiation from radioactive sample. |
| | CH 252 | |
| | CH-352: Inorganic chemistry | • Understand the basic concept of the co-ordination compound, and identify the types of given ligand, chelates. |
| | | • Understand the different physical method for the study of complexes and assumptions, drawbacks and isomerism in Werner"s theory. |
| | | • Understand Effective atomic number (EAN) and how to calculate EAN for any given complexes. |
| | | • Understand the modern theories of metal-ligand bond related to valence bond theory. |
| | | Application of CFT related to different geometry e. Square planer, tetrahedral, Octahedral. |
| | | • Understand the basic concept about CFT e. Spin magnetic moment, crystal field stabilization energy related to weak and strong field, limitation of theory. |
| | | • Understand the modern theories of metal-ligand bond related to Molecular orbital theory, and difference between B.T., C.F.T. and M.O.T. |
| | CH-353: Organic chemistry | Understand Polarity picture of carbonyl group and nucleophilic addition reaction to it. |
| | <u> </u> | Introduction concept of aromaticity electrophilic and nucleophilic aromatic substitution reaction. |
| | | Molecular rearrangement involving migration to C, N and Oxygen. |
| | | Drawing the resonating structures. |
| | | Understand Nuclophic substitution reactions. |

| | Understanding electrophilic addition reactions. |
|---|--|
| | |
| CH-354: Analytical Chemistry SEM V | Understand procedure of extraction of metal ions using Solvent Extraction process. |
| | • Understand the application of Ion Exchange Chromatography method for the separation of cations and anions using different types of resins. |
| | Understand applications of Size Exclusion Chromatography for the separation of analytes based on their size and shapes. |
| | • Understand the working of Gas Chromatographic unit and apply the knowledge to separate volatile compounds in sample. |
| | • Understand Principle, choice of column materials for HPLC and its application. |
| | Understand Principles of Electrophoresis and choice of techniques of electrophoresis for various applications |
| CH-355: Industrial chemistry | understand general concept of Industrial chemistry. |
| | Understand manufacturing of sugarcane. |
| | understand general idea of differ physical methods used in manufacturing. |
| | understands various types of fertilizer. |
| | Understand manufacturing of Beer and spirit. |
| | understand the aspects of small scale industry. |
| CH 356: B Environmental chemistry | Understand the concept to awareness about environmental chemistry |
| | Understand the concept about atmosphere and different layer and composition |
| | Understand the concept. awareness about air pollution and organic inorganic pollutants |
| | Understand the concept, water pollution and domestic sewage waste water, industrial pollution agriculture pesticide water pollution. |
| | • Understand the different methods of water treatment, water effluents and sewage water. |
| | Understand the green house gases and global warming. |
| CH-357,367: Physical Chemistry Practical | Prepare molar and normal solutions of various concentrations. |
| | • determine concentration of unknown solutions by Spectrophotometric method. |
| | Measure the pH, pKa and Ka of various acids by potentiometry. |

| | • Measure refractive index, molar refraction and unknown concentration of various solvents. |
|--|---|
| | • Determine the molecular weight of a given polymer by turbidimetry. |
| | Investigate the reaction rate. |
| CH 358,368: Inorganic practical | estimate ores and alloy by gravimetric and volumetric method. |
| | Separate and analyze binary mixtures by qualitative method |
| | • Prepare and determine percent purity of various inorganic complexes. |
| | Perform chromatographic technique (paper chromatography). |
| | Estimate Lead, Iron by gravimetric method. |
| | Estimate Titanium and Iron by Spectrophotometric method. |
| CH 359,369: Organic practical: | Separate and analyze binary water insoluble mixture |
| | Separate and analyze binary water soluble mixture |
| | Estimate - acetamide, glucose by volumetric method |
| | Estimate basicity of various acids. |
| | Prepare various organic compounds. |
| | Understand Thin Layer Chromatographic techniques and physical constant. |
| T.Y.B.Sc Sem VI CH-361: Physical chemistry. | Understand the types of spectra, Rotational, Vibration and Electronic energy levels. |
| | difference between order and Molecularity |
| | Understand the first, second and third order reaction. |
| | Understand the concept anisotropic, isotropic, etch figure, polymorphism, |
| CH-362: Inorganic chemistry | • understand the electronic structure, Extraction uses, oxidation states biological role of Cu. |
| | know about the all basic theory of Acid and bases. |
| | • understand the concept of Hard and Soft acid bases concept theories, application and limitations. |
| | know the different types and theories of Corrosion and how to protect Metal from corrosion. |
| CH-363: Organic chemistry | • Understands common terms in spectroscopy. |
| | • Learn Physical methods of structure determination which includes IR, UV and NMR. |
| | Solve the problems based on IR, UV and NMR. |

| | understand retro synthesis. |
|------------------------------------|---|
| | predict synthons and reagents. |
| | Solve the problems based on retro synthesis. |
| CH-364 Analytical Chemistry | • perform the analysis of samples using instrumental methods |
| | understand the concepts of spectrometry, know the principles of instruments and their applications |
| | understand principle, working and applications of Flame and Plasma Emission Spectrometry. |
| | understand principle, Instrumentation and application of Atomic Absorption Spectrophotometry |
| | understand principle, Instrumentation and applications of Turbidimetry and Nephelometry. |
| CH-365: Industrial chemistry | Understand the process of manufacturing of petrol and gasoline. |
| · | • Understand the process of manufacturing of methanol. |
| | Understand the process of manufacturing of soap. |
| | Understand the process of manufacturing of detergents. |
| | Understand classification of dyes and paints. |
| | Understand properties of drugs. |
| CH 366: Polymer chemistry | Understand the basic concepts of polymerization. |
| | Understand the different methods of polymerization. |
| | Understand various techniques of polymerization. |
| | Understand the preparation, properties and applications of PE, PVC, Polystyrene, polyacrilonytrile, |
| | Understand the concept Glass transition temperature |
| M.Sc. Part I: | |
| CH-P-110: Physical Chemistry I | Understand the terms eigen function, eigen value, operator and postulate of Quantum mechanics. |
| | • Understand mechanics of particle in one, two and three dimensional box |
| | • Learn parent –daughter relationship, application of radioactivity, NAA, IDA. Effect of radiation and units of radiation. |
| | • Learn the Fricke and cerric sulphate dosimeter. |
| | Understand the terms ionic strength, activity coefficient .DHO equation. Understand the adsorption of gases by solid types of isotherms. |
| | |

| CH130: Inorganic chemistry Paper I | Learn molecular orbitals and its orientation. |
|---|---|
| | Understand about geometry and shape of the molecule |
| | Learn and find out bond order and dipole moments of the inorganic molecule. |
| | • Learn 18 electron rule and application. |
| | Determine the point group of inorganic molecules. |
| CH -150 :Basic Organic Chemistry | • understand stereo chemical principles, enantiomeric relationship R and S ,E and Z nomenclature in C,N,S,P containing compound. |
| | • understand SN1, SN2 and SNi mechanism and stereochemistry. |
| | • understand NGP by pi and sigma bonds, classical and non -classical carbocations . |
| | understand alkylation and acylation reaction. |
| | Learn and solve problem type of elimination |
| CH-P-210: Physical Chemistry II | Understand the thermodynamic description of mixtures state function, exact, inexact differential. |
| | • Understand the colligative properties of solutions, depression in f.p., elevation in b.p, osmotic pressure. |
| | Understand the statistical thermodynamics and various partition functions. |
| | • Understand the consecutive elementary reactions, rate determining steps, steady state approximation, pre-equilibria, Michaelis-Menten mechanism, Lindemann- Hinshelwood mechanism, chain reactions. |
| CH: 230 - Inorganic chemistry Paper II | Understand about structure of atom, Hunds rule, Term symbol, calculation of microstates, orbital selection rule. |
| | • learn mechanism in transition metal complexes. |
| | • Learn radius ratio rule of coordination no 3,4, |
| | Understand the Born-Haber cycle to calculate lattice energy. |
| CH-25 | 0 Name Reactions, Synthetic Organic Chemistry & Spectroscopy |
| C11-23 | • learn various name reaction with example. |
| | use synthetic reagents of oxidation and reduction for solving the example. |
| | • understand mechanism of rearrangements reaction . |
| | • interpret IR spectra on basic values IR frequencies |
| | • learn factors affecting on UV absorption spectra. |
| CH-290- | |

| General Chemistry | |
|--|---|
| | • Solve the problems on Chemometrics Mean and Standard deviation. |
| | • Learn theory of electrogravimetric analysis, Electrolytic separation and determination of metals. |
| | Know Instrumentation, choice of Mobile Phase, Solvent Treatment systems, Pumping systems, Sample injection systems, Columns for High Performance Liquid Chromatography. |
| | Learn principle, theory of Glass Membrane Potential, The Alkaline and Acid Error, Standard Buffers, Accuracy of pH, Measurements with the pH-meter, types Ion-selective Electrodes. |
| | • Learn Voltammetric Electrodes, Detectors, Amperometric Sensors, Amperometric Titrations. |
| CH-P-1 : Physical Chemistry Practical | prepare molar and normal solutions of various concentrations. |
| | determine concentration of unknown solutions and degree of hydrolysis and hydrolysis constant by Spectrophotometry. |
| | • Determine stability constant of a complex ion and standard free energy change $\Delta G0$ and equilibrium constant by potentiometry. |
| | • investigate the rate constant for depolymerization , energy of activation and order of the reaction |
| CH: I-1: Practical course Inorganic chemistry: | Perform gravimetric and volumetric analysis ores. |
| enemistry. | • Analyse binary mixtures by gravimetric and volumetric method. |
| | Prepare various inorganic complexes and determination of its Percent purity. |
| | analyse iron from given drug sample and calcium in milk sample. |
| | Perform paper chromatographic technique. |
| CH –O- 1 Organic Chemistry practical | • Know uses of chemistry software"s like ISI draw, chem Draw, Chem sketch. |
| 1 | • draw the different structure of organic compound. |
| | perform Thin layer chromatography technique for completion of reaction. |
| | perform single and two stage preparation. |
| | Make use of soxhlet extractor and steam distillation assembly for Purification of organic compound. |
| M.Sc. II | |
| Organic CH | • Compare the major and minor product of variety of organic reaction. |

| 350: Organic Reaction Mechanism | |
|--|---|
| | Understand accepted mechanism of organic reaction including all intermediates |
| | Solve the problems on Taft and Hammet constant. |
| | Understand Concave upward and downward deviation. |
| | • Learn the type"s hydrolysis of ester. |
| | CH-351: Spectroscopic Methods in Structure Determination |
| | Understand principle and instrumentation of 1H NMR, 13 C NMR and Mass spectroscopy. |
| | • Investigate structures on these techniques. |
| | • Resolve structure of organic compounds by 2D NMR techniques. |
| | Analyze reaction sequences by using spectroscopic technique. |
| CH-352 (Organic stereochemistry | Understand the basic concepts of stereo chemistry |
| , | assign structure of organic molecules. |
| | • learn Three dimensional structure of cyclic and acyclic compounds |
| | Use selectivity of reagents for chemical reactions. |
| CH-353: F | Free radical, photochemistry, per cyclic reaction and their applications |
| | Understand term quantum yield, and electronic states and transitions in molecules. |
| | • Understand Norrish-I and Norrish-II cleavages, Paterno-Buchi reaction. |
| | • Understand Photochemistry of olefins and arenas: 1, 2-, 1, 3- and 1, 4-additions. |
| | Understand free radical reaction contain Halogen, Sulphur, and, Selenium Group transfer reaction. |
| CH-450: Chemistry of Natural Products | • know concept of biogenesis of natural products. |
| | Classify sources of various vitamins. |
| | • Learn biological importance of vitamins B1, B2, B6, folic acid, B12, C, D1, E, K1, and K |
| | Understand and apply the role of enzyme in reactions. |
| | Synthesize natural organic compounds by chemical methods. |
| | Learn the stereochemistry of natural product. |
| CH-451: | Understand Transition metal complexes in organic synthesis, Grubb"s |

| Synthetic Methods in | catalyst, Ziegler Natta catalyst. |
|-------------------------------------|---|
| Organic Chemistry | |
| | Design the organic compounds by use of synthetic reagents |
| | Understanding role of Ump lung in organic synthesis. |
| | • Understanding Protection and deportation in the synthesis of polypeptide and polynucleotide. |
| | • Know basic principles of green chemistry and design green synthesis. |
| | • Use ecofrindly green reagents, solvents, catalysts and reaction conditions. |
| CH-452: Heter | ocyclic chemistry, Chiron approach, chiral drugs and medicinal chemistry. |
| | • Know the main synthetic routes and reactivity for variety of heterocyclic compounds and applications. |
| | • Understand Important Terms –Receptor, therapeutic index, bioavailability, Drug assay and Drug Potency used in medicinal chemistry. |
| | Understand Structure of triose, Pentose, hexose, Stereochemistry and reaction of Glucose. |
| | • Understand Synthesis and Pharmacological activity of S-Ibuprofin , S- Metaprolol, (+) Ephedrime |
| | Understand basic Pharmacokinetics of drugs, anti Microbial drugs, Antifungal, Antibacterial, antiviral, antiprotozoals. |
| | CH-O2 (organic Practical chemistry MSc II) |
| | • separate organic compounds in different phases. |
| | • perform qualitative test to analyze functional group of organic compounds. |
| | • learn distillation technique. |
| | • detect elements N, S, and X in organic compounds. |
| | • use purification techniques of organic compounds . |
| CH -O-3: Three stage preparations | • perform three stage preparation. |
| | draw the reaction mechanism. |
| | • Purify the organic compounds by crystallization. |
| | Perform chromatographic technique to check completion of reaction. |
| | Apply the knowledge about different reaction conditions. |
| CHO-4: Short Research Project | |
| | survey literature for the topic of the project. |
| | • Learn to apply reaction conditions for synthesis, isolation of product and give mechanism. |
| | Handle instruments for analysis and discuss their experiment al results. |
| | Used ICT tools to prepare project reports and present it using Power point presentation. |
| | Work within a small team to achieve a common research goal. |

DEPARTMENT OF COMMERCE (2019-2020)

| F.Y.B. | | Students will be aware about modern |
|--------|--------------------------|---|
| Com | Modern Office | officemanagement concept |
| | Management | • Students will be able to understand |
| | | officeappliances |
| | | •students will able to managerial function in |
| | | the office and office work |
| | | Students will be able to understand role |
| | | &activities of modern office |
| | | management. |
| | | Students will be aware about |
| | | digitalappliances related to |
| | | modern office management. |
| | | Students will be able to office |
| | | work inoffice |
| | | • Students will be aware about piecemeal |
| | Financial and Cost | distribution of cash. |
| | Accounting | • Students will be able to understand concept |
| | | of financial and cost accounting. |
| | | • Students will be able to understand higher |
| | | purchase system, Investment, Royalty A/C |
| | | • Students will be able to understand concept of partnership a/c. |
| | | Students will be able to understand |
| | Computing skill | thestatistics technique on |
| | &Quantitative Techniques | quantitative data |
| | | • Students will be able to understand |
| | | mean, median, Mode, Quartile |
| | | Deviation, Range, |
| | | Percentile etc. |
| | | Students will be able to understand the |
| | | logicand resining in the market situation. |
| | | Students will be able to work on tally in |
| | | theoffice. |
| | | Students will able to work with |
| | | computerizedaccounting |

| | Marketing & Advertising | Students will be able to understand marketing techniques • Students will be able to understand adverting techniques. • Students will be able to understand 7 Ps of marketing mix . • Students will be able to understand product life cycle stages. • Students will be able to understand modern marketing techniques |
|-----------|--|---|
| | Principles & Practices of Banking | Students will be able to understand Banking system in india Students will be able to understand concept of modern Bank, structure of bank, payment and settlement system in India. Students will be able to understand banks primary and secondary functions. |
| S.Y.B.Com | Business Management | Students will be able to understand business manager's functions. Students will be able to understand various theories on business management. Students will be able to understand concept of each business function scientifically. Students will be able to do business in the modern era. |
| | Corporate Accounting &Costing | Students will be able to understand corporate accounting of companies. Students will be able to understand Issue of shares and debentures, buy back of equity share, Redemption of preference shares and debentures, Profit Prior to Incorporation |
| | Business & Tax Laws | Students will be able to understand Business and Tax Related Laws. Able to understand of Income tax Act. Able to understand Indian Contract act, Sales Act, Patent act, information technology Act, Negotiable Instrument Act, Foreign Trade act. Goods & service act. |
| | Computing Managementand business communication | Students will be able to understand computerised accounting. Students will be able to understand process |

| | | of tally ERP 9 • Students will be able to understand the Tally with VAT • Students will be able to understand the voucher Entries Steps including VAT. • Students will be able to understand the business communication. • Students will be able to understand the business communication process and business letter |
|-----------|--|---|
| | Business Entrepreneurship | Students will be able to understand Business Entrepreneur concepts, functions, Qualities & Role Able to understand Classification and types of Business Entrepreneur Able to Understand Impact on Business Entrepreneurship, innovative businessman's Success and Women Entrepreneur. |
| | Modern Banking & Financial System in India | To acquaint students with the new concepts of Banking. To update the students about new changes in Banking. To know the relevance banking practices in modern competitive world. To make understandable of banking operations. |
| | Retail Management | To introduce basic Retail Management Concepts. Empowering students with the most modern techniques and practices of Retailing seen and experienced around the globe. To learner will be able to determine a level of interest in pursuing carrier in Retail Management. |
| T.Y.B.Com | Principles & Practices of Auditing | To understand the audit concepts, objectives, principles, advantages and disadvantages, auditing related with other subject. To understand the types of audit ,Audit Programme, Documentations, Evidences, Vouchers, Vouching, Verification and Valuation To understand the student internal control system, Audit of Limited Companies in India and Audit Report. |
| | Human Resource Management | To understand the concept of Human resource management To introduce the concept, principles, and practices of HRM to the students. |

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