

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 successful life.
4. Understood scientific and fundamental principles 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 develops novel ideas and solutions to the problems.
8. Develops 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 (2017 - 2018)

DEPARTMENT OF HISTORY		
Class	Course	Outcomes (Students will be able to)
FYBA	HIS- 101 – G1 History of Indian Freedom Movement	<ul style="list-style-type: none"> • Understand modern Indian history
		<ul style="list-style-type: none"> • Identify the importance and the legacy of Freedom Movement.
		<ul style="list-style-type: none"> • Distinguish the detail account of British raj as well as its overall impacts on the Indian society.
		<ul style="list-style-type: none"> • Evaluate the renaissance and social reform movement in India.
		<ul style="list-style-type: none"> • Understand some of the early resistance to British rule.
	HIS - 201 - G1 History of Indian Freedom Movement(A. D. 1905 - 1947)	
		<ul style="list-style-type: none"> • Identify the social institutions of late nineteenth century.
		<ul style="list-style-type: none"> • Understand various phases of the national movement.
		<ul style="list-style-type: none"> • Understand the difference between moderates, extremists and revolutionaries.
		<ul style="list-style-type: none"> • Comprehend the socio-religious scenario and the social reformation.
		<ul style="list-style-type: none"> • Grasp the details of freedom movement under the Mahatma Gandhi"s leadership.
		<ul style="list-style-type: none"> • Understandthe evolutionary processes of constitutional developments.
	HOC- G - 101: History of Civilization	<ul style="list-style-type: none"> • Understand the civilization of ancient world.
		to understand the cultural human values in view of history.
	HOC- G - 201: History of Civilization	<ul style="list-style-type: none"> • 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)	
		<ul style="list-style-type: none"> • Explain the reasons behind Chatrapati Shivaji's early conflicts with the regional lords and the outsiders.
		<ul style="list-style-type: none"> • Know about the administrative need and the importance of grand coronation of Chatrapati Shivaji
		<ul style="list-style-type: none"> • Assess the Chhatrapati Shivaji's invasion on Karnataka.
	HIS- 232 – S1 Modern India 1757 - 1855	understand the establishment and expansion of British power in India
		understand the economic policy of British Empire.
		understand the conflict between Indian state and British
	HIS- 233- S2 History of Ancient India (B.C.3000 - B.C.400)	<ul style="list-style-type: none"> • Perceive various sources to study of Ancient India.
		<ul style="list-style-type: none"> • Know about the development and the achievements of man in the Stone Age.
		<ul style="list-style-type: none"> • Understand the glory of Indian history in the age of Harappan civilization.
		<ul style="list-style-type: none"> • Comprehend the history of Vedic period.
		<ul style="list-style-type: none"> • Understand the philosophy of Jainism and Buddhism.
		<ul style="list-style-type: none"> • Perceive influence of political support on religion.
	HIS 241 (G-2) : Rise of Maratha Power (1674-1707)	<ul style="list-style-type: none"> • Understand the formation of welfare state during the Maratha rule
		<ul style="list-style-type: none"> • Understand the industrial and agricultural aspects of Chhatrapati Shivaji's regime
		<ul style="list-style-type: none"> • Understand the administrative aspect of the Swarajya.
		<ul style="list-style-type: none"> • Understand the conflict for throne after the death of Chhatrapati Shivaji
	HIS- 242 – B S1 Modern India (1805-1857)	understand Indian social reformation.
		understand the British policy towards Indian society.
		understand the Raja Ram Mohan Roy work
		understand the rising of 1857

	HIS 243 (S-2) : History of Ancient India (B.C.400 – A.D. 1206)	<ul style="list-style-type: none"> • Know about the Mauryan Empire.
		<ul style="list-style-type: none"> • Perceive socio-economic, religious situation under the Maurya.
		<ul style="list-style-type: none"> • Understand emergence of feudal system in Indian society
		<ul style="list-style-type: none"> • Comprehend about the Gupta period.
		<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Understand the civilization of ancient world.
		to understand the human values of civilization in the view of history.
	HOC- G - 251: History of Civilization	<ul style="list-style-type: none"> • 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)	<ul style="list-style-type: none"> • Understand the importance of world peace right after the world war Ist.
		<ul style="list-style-type: none"> • Evaluate the Russian revolution and the first experiment of the communist government.
		<ul style="list-style-type: none"> • Understand the fascism and the rise of dictatorship in Europe.
		<ul style="list-style-type: none"> • Explain the aftermaths of the World War II on the world politics.
		<ul style="list-style-type: none"> • Understand how Russia and America emerged as superpowers on the verge of cold war.
	HIS 352(B)- S3 - Expansion of the Maratha Power (1707-1761)	<ul style="list-style-type: none"> • Understand the importance of the Maratha history in 18th century.
		<ul style="list-style-type: none"> • Asses the circumstances under which rise of the Peshwas took place.
		<ul style="list-style-type: none"> • Understand the political scenario of the Maratha power in the early 18th century
		<ul style="list-style-type: none"> • Understand the policies adopted by early Peshwas.
	HIS (S4) 353 History of Sultanate (1206-1707).	<ul style="list-style-type: none"> • Understand early difficulties of Sultans in India
		<ul style="list-style-type: none"> • Grasp territorial expansion of Sultanat Period.

		<ul style="list-style-type: none"> • Understand the administrative setup of Sultanat from central to local level.
		<ul style="list-style-type: none"> • Know the system of trade & commerce during the period of Sultanat .
		<ul style="list-style-type: none"> • Understand the nature of village community & the relationship between the different sections of society.
		<ul style="list-style-type: none"> • Understand the aspects of fiscals & monetary system under the Sultanat.
		<ul style="list-style-type: none"> • Grasp the attitude of emperors towards religion under the regime of Sultanat.
	HIS 361 - G3 - History of Modern World (1901-1945)	<ul style="list-style-type: none"> • Understand the importance of world peace right after the world war Ist.
		<ul style="list-style-type: none"> • Evaluate the Russian revolution and the first experiment of the communist government.
		<ul style="list-style-type: none"> • Understand the fascism and the rise of dictatorship in Europe.
		<ul style="list-style-type: none"> • Explain the aftermaths of the World War II on the world politics.
		<ul style="list-style-type: none"> • 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)	
		<ul style="list-style-type: none"> • Explain the circumstances of the Maratha power after the battle of Panipat.
		<ul style="list-style-type: none"> • Knowthe reasons of political disintegration of the Marathas.
		<ul style="list-style-type: none"> • Understandthe nature of Aglo-Maratha relations.
		<ul style="list-style-type: none"> • Understandthe central and provincial administration of Marathas under the Peshwas.
	HIS (S4) 363 History of Mughal (1526-1707)	<ul style="list-style-type: none"> • Understand the political situation of India on the eve of Babar's invasion.
		<ul style="list-style-type: none"> • Grasp territorial expansion of Mughal empire
		<ul style="list-style-type: none"> • Understand the emergence & consolidation of Sher Shah.
		<ul style="list-style-type: none"> • Grasp the Mughal concept at divine theory of kingship & state
		<ul style="list-style-type: none"> • Understand the administrative set up of Mughals.
		<ul style="list-style-type: none"> • Comprehend the basic features of Mansabdari& change in it during 17th century.
		<ul style="list-style-type: none"> • Know the system of trade & commerce during the period of Mughals.
		<ul style="list-style-type: none"> • Understand the nature of village community.

		<ul style="list-style-type: none"> • Grasp the some aspects of fiscals & monetary system of Mughals.
	HOC- G -251 : History of Civilization	<ul style="list-style-type: none"> • Understand the civilization of ancient world.
		to understand the human values of civilization in the view of history.
	HOC- G -261 : History of Civilization	<ul style="list-style-type: none"> • Understand the civilization of ancient world.
		to understand the human values of civilization in the view of history.

DEPARTMENT OF MARATHI (2017-18)

Class	Course	Outcomes(Student will be able to)
F.Y.B.A Sem: I	MAR-G-111(A) VanganayPrakar Kadambari	<ul style="list-style-type: none"> • Kadambari vatchal • Kadambarichi Vaishisthye • Kadambariche Ghatak • Kadambariche Prakar
F.Y.B.A Sem :II	MAR-G-121(A) Vanganay Prakar- Kavya	<ul style="list-style-type: none"> • Kavya Sankalpana • Kaviteche Ghatak • Kaviteche Prakar • Kavaiteche Pravaha
S.Y.B.A Sem :III	MAR-G-231 (A) VangmayPrakarKadambari	<ul style="list-style-type: none"> • KadambarichiOlakha • KadambarichiPrerana • KadambaricheGhatak- Prakar • KadambaricheVatcha
	MAR-S1-232 : MadhyauginGadhyaVangmay Prakar	<ul style="list-style-type: none"> • ShivkalinSwarajyaNiti • SwarajyaNitisathiAdanyapatracheMahat va • LokkalyankariYojanachaMadhauginRaj yakartayanchiNiti
	MAR- S2_233: SahityaVicharSwarup	<ul style="list-style-type: none"> • BhartiyavaIngrajitilSahaityaSankalpana • SahaityacheSwarup • PrayojanvaNirmitiPrakriya

		<ul style="list-style-type: none"> • SahityacheVividhaPrakar
S. Y. B. A Sem :IV	MAR-G-241 (A) VangmayPrakarAtmakathan	<ul style="list-style-type: none"> • MarathitilAtmcharitra • AtmakathanSwarup • AtmakathanacheSwarupVaVaishitye • AtmakathacheVegalepan
	MAR-S1-242 : MadhyauginPadhyaVangmayP rakar	<ul style="list-style-type: none"> • MadhyauginPadhyaVangmayParichay • SantavangmayachiPerana • SantavanmayachiSwarup • SantanchiAdhytaimik
	MAR- S2-233: SahityaVicharSwarup	<ul style="list-style-type: none"> • BhartiyavaIngrajitilSahaityaSankalpana • SahaityacheSwarup • PrayojanvaNirmitiPrakriya • SahityacheVividhaPrakar
	MAR- 243: SathityaSwarupVichar	<ul style="list-style-type: none"> • SahityachiBhashya v Mulye • Akalan, Ashwad v sanskar • VangamayinAbhiruchi • PradeshikSahitya
T. Y. B. A Sem:V	MAR-G- VangmayPrakarNatak	<ul style="list-style-type: none"> • NatakacheSwarup • NatakacheGhatak • NatakachePrakar • SukhatmikavaSokatmikaparichay
	MAR-S3: Adhunik Marathi VangmayachaEtyahas(1920- 1960)	<ul style="list-style-type: none"> • Katha VangmayachaParichaya • Katha karanchaAbhyas • VangmayPravahanchaParichaya • ParmukhaLekhakkaryaVaParichaya
	MAR-S4: BhashyaVidnyanva Marathi Vayakran	<ul style="list-style-type: none"> • BhashyaSwarup, Karya • Swan Nirmitivakarya • Swanimasnkalpana • Marathi VyakranatilPramukhaGhatak
T. Y. B. A Sem VI	MAR-G- SahityaAkadamiPuruskritLek hakancheLalitGadhya	<ul style="list-style-type: none"> • LalitGadhyaSwarup • LalitGadhyaParmpara • LalitgadyatilAnubhav, Swedana, sangharshya
	MAR-S3: Adhunik Marathi Vangmayachaetyahas (KavitavaNatak)	<ul style="list-style-type: none"> • 1920-60 Kavisthulparichay • 1920-60 Kavinchaparichaya • 1920-60 Nataksthulparichay • 1920-60 NatakParichaya

	MAR- S4: Marathi Vyakaran	<ul style="list-style-type: none"> • VyakaranKarya • SabdanchyaJati • BhashecheGhatak
F.Y.B.Com Sem I	MAR –G- local language – optional marathi	<ul style="list-style-type: none"> • Lalitgadhyamahanjekay • LalitGadhyacheGhatak • LalitGadhyachePrakar • LalitGadhyatilBadal
F.Y.B.Com Sem II	MAR –G- local language – optional marathi	<ul style="list-style-type: none"> • LekahnKaushalyMhanje Kay • LekhanKaushalya – Tantra • LekanAviskarchePrakar
S.Y.B.Sc Sem III	MAR-G-231Lalit Vangmay - Vidanyan	<ul style="list-style-type: none"> • CharitraMahanje Kay • CharitracheKhatak • CharitracheParakar • CharitrachaPrerna
S.Y.B.Sc Sem IV	MAR-G-214 LalitVangmay	<ul style="list-style-type: none"> • Natak – sankalpanavaVyakhya • NatakacheGhatak • NatkachePrakar • NatkachaEtyahas

DEPARTMENT OF ENGLISH (2017-18)

Class	Course	Outcomes
FYBCom	COMPULSORY ENGLISH	<ul style="list-style-type: none"> • The students could express themselves in oral and written communicative situations.
		<ul style="list-style-type: none"> • The students could communicate effectively in their various business situations.
		<ul style="list-style-type: none"> • The verbal and non-verbal skills of communication are developed.
FYBA	COMPULSORY ENGLISH	<ul style="list-style-type: none"> • Students use the values learnt through literary works.
		The Students should express their thoughts in English.
	OPTIONAL ENGLISH	<ul style="list-style-type: none"> • Development of the comprehensive ability of students.
		<ul style="list-style-type: none"> • Inculcation of moral and human values among students.
		<ul style="list-style-type: none"> • Understanding of the basic forms of poetry.
SYBA	COMPULSORY ENGLISH	<ul style="list-style-type: none"> • The students' literary tendencies are developed.
		<ul style="list-style-type: none"> • The students could express themselves in oral and written communicative situations.

		<ul style="list-style-type: none"> • The students could improve vocabulary.
		<ul style="list-style-type: none"> • The students are able to use English effectively in formal and informal situations of life.
	General Paper -2	<ul style="list-style-type: none"> • The students are able to appreciate literature critically.
	(Introduction to Study of English Language and Literature)	<ul style="list-style-type: none"> • The students could use their creative and critical faculties of mind in real life situations.
		<ul style="list-style-type: none"> • The learners are able to apply the science of pronunciation and oral form of English language.
		<ul style="list-style-type: none"> • The students use literature to develop their social and moral sense in life.
	ENGLISH Special Paper -I	<ul style="list-style-type: none"> • The students learn to correlate literature to socio-political conditions of its time.
		<ul style="list-style-type: none"> • The students are able to use their creative and critical faculties of mind in real life situations.
		<ul style="list-style-type: none"> • The learners could implement the values of literature in life.
	ENGLISH Special Paper -II	<ul style="list-style-type: none"> • Students could learn Language through literature.
		<ul style="list-style-type: none"> • The syllabus can implement the values of literature in life.
		<ul style="list-style-type: none"> • Students know the culture of the times.
TYBA	Compulsory English	<ul style="list-style-type: none"> • The students understand the basic concept of literary genre, poem, prose and stories.
		<ul style="list-style-type: none"> • To help the students to develop literary abilities.
		<ul style="list-style-type: none"> • The students' communicative skills are developed.
	Special English-G-III	<ul style="list-style-type: none"> • The students learn the origin of drama and dramatic art.
		<ul style="list-style-type: none"> • The students learn the aspects and genres of drama.
	Special Paper-III	<ul style="list-style-type: none"> • The students develop the critical understanding literature.
		<ul style="list-style-type: none"> • The students are exposed to Indian writing in English and American literature.
		<ul style="list-style-type: none"> • The students are exposed to social, political and cultural background.
	Special Paper-IV	<ul style="list-style-type: none"> • The students understand the properties and functions of language.
		<ul style="list-style-type: none"> • Inculcation of phonological competence among

		students.
		<ul style="list-style-type: none"> • The students are acquainted with English grammatical forms and functions.
		<ul style="list-style-type: none"> • The students are acquainted with morphological concepts and processes.
SYBSC	ENGLISH	The students should aware the lives of great businessmen of the centiury.
		The sudents will emplement things, they learne in cou

DEPARTMENT OF ECONOMICS (2017-18)

Department of Economics

FY BA	Eco G-101(A) - Fundamentals of Economics-I	<ul style="list-style-type: none"> • Students will be aware about fundamental concepts of economics • 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) - Fundamentals of Economics- II	<ul style="list-style-type: none"> • Students will be aware about various forms of market • 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 of govt. financing
SY BA	ECO 231- Indian Economy since 1980 – I	<p>Students will be able to understand nature of Indian economy</p> <ul style="list-style-type: none"> • 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 Economy since 1980 – II	<p>Students will be able to understand industrial sector in India</p> <ul style="list-style-type: none"> • Students will be able to understand cooperative sector in economy

		<ul style="list-style-type: none"> • Students will be able to understand economic planning in India • Students will be able to understand recent structural changes in economy
	ECO 232- Advanced Micro Economics – I	<ul style="list-style-type: none"> • To understand individual agents of market • 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 Micro Economics – II	<ul style="list-style-type: none"> • Students will be able to understand price 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 Macro Economics – I	<ul style="list-style-type: none"> • Students will be able to understand macro economic analysis • Able to understand of national income • Able to understand classical & Keynesian theories of output and employment • Able to understand consumption & Investment function
	ECO 243- Advanced Macro Economics – II	<ul style="list-style-type: none"> • Students will be able to understand process of credit creation by commercial banks • Students will be able to understand Quantity theory of money. • Students will be able to understand various macroeconomic problems. • Students will be able to understand various macroeconomic policy
TY BA	ECO 351 - Indian Economy since 1980 – III	<ul style="list-style-type: none"> • 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 Economy since 1980 – IV	<ul style="list-style-type: none"> • Students will be able to understand federal fiancé in India • Students will be able to understand

		<p>Indian tax system</p> <ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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.C OM	Micro Economics	<p>To understand the concepts of of micro economics concepts Demand & Supply Analysis</p> <p>To understand the theory of production and production cost analysis.</p> <p>To understand the concept market types.</p>
S.Y. B.C OM	Macro Economics	<p>To understand the background of macro Economics</p> <p>To understand the concept of National Income, Classical theory</p> <p>To understand the Keynesian views and post Keynesian Views</p>
T. Y. B. C O M	Indian Economics Scenario (1980-81)	<p>To acquaint students with new concept of Economics.</p> <p>To update the students about new changes brought in Indian Economy</p> <p>To know the relevance economic practices in modern competitive world.</p> <p>To make student competent to become success in competitive examination.</p>

DEPARTMENT OF HINDI (2017- 18)

Class	Subject Code	Course Title	Objectives	Outcomes(Students will be able to)
F.Y.B.A.	Hin-111 - A (G-1)	Hindi Samanya-1	Sahityakivibhinnavidhaosepari chitkarana	Gadya, padya, vyakaran, patralekhan, anuvadprakriyakojanakarata

				msathkarana
	Hin-121 – A (G-2)	Hindi Samanya- 2	Sahityakivibhinnavidhaosepari chitkarana	Gadya, padya, vyakaran, patralekhan, anuvadprakriyakojanakarat msathkarana
S.Y.B.A.	Hin-231 – A G-3	Hindi Samanya	Chhatronkokahanividhaevmkh andkavya se parichitkarana	kahanividhaevmkhandkavy aketattvonkosamjhana
	Hin-232 (S- 1)	Hindi Vishesh-1 (kavyashashtra)	Kavyashashtrakasamanyaghya nkarana	Kavyaevamgadyaketattvon separichitkarana
	Hin-233(S- 2)	Hindi Vishesh-2 (Upanyas, vidha)	UpanyasevamNatakvidhaonkiv isheshtaonkosamjhana	UpanyasevamNatakvidhao nkekemadhyamsemanvimu lyonkepratiasthanirmankar ana
	Hin-241 A G-4	Hindi Samanya	Khandkavya se parichitkarana	Kuruksheprakavyakopadhka ryuddhikibhishanatakosama jhana
	Hin-242 (S- 3)	Hindi Vishesh-1 (kavyashashtra)	Kavyashashtrakasamanyaghya nkarana	Kavyaevamgadyaketattvon separichitkarana
	Hin-243(S- 4)	Hindi Vishesh-2 (Natakvidha)	Natakvidhakosamjhana	Natakvidhakemadhyamse manvimulyonkepratiasthan irmankarana
T.Y.B.A.	Hin-351 A	Hindi Samanya (G-3)	EkankievamNibandhvidhasepa richitkarana	EkankievamNibandhvidhaki vesheshtaonkosamjhana
	Hin-352	Hindi sahityakaitihas (S-3)	Hindi sahitya se parichithona	Hindi sahityakevibhinncalonkigati vidhiyonkosamajhana
	Hin-353	Bhashavigyantat harashtrabhash aandolankaitiha s	Bhashavigyakemadhyamsebha shakibarikiyonkosajhana	Dhvani, shabd, vakyaevarthkisthitikosa majhana
	Hin-361 A	Hindi Samanya (G-3)	EkankievamNibandhvidhasepa richitkarana	EkankievamNibandhvidhaki vesheshtaonkosamjhana
	Hin-362	Hindi sahityakaitihas (S-3)	Hindi sahitya se parichithona	Hindi sahityakevibhinncalonkigati vidhiyonkosamajhana
	Hin-363	Bhashavigyantat harashtrabhash aandolankaitiha s	Bhashavigyakemadhyamsebha shakibarikiyonkosajhana	Dhvani, shabd, vakyaevarthkisthitikosa majhana
M.A.i	Prasnpatra- 1 Hin-0111	Samanyastar- kathasahitya	Adunikthasahitya separichithona	Adunikthasahitya se parichitkarakarkathasahity akeprati ruche nirmankarana
	Prasnpatra- 2 Hin-0112	Vishashstar- AdikalinevamBh aktikalinkavya	AdikalinevamBhaktikalinkavya se parichitkarana	AdikalinevamBhaktikalinka vya se parichitkarakardonokeprav ruttiyonkosamajhana

	Prasnpatra-3 Hin-0113	Vishashstar-Bhartiyevampaschhatyakavyashastratathaaloचना	Bhartiyevampaschhatyakavyashastratathaaloचना	Bhartiyevampaschhatyakavyashastratathaaloचना amajhakarkavyashashtrakevibhinnasiddhantonkosamajhana
	Prasnpatra-4 Hin-0114(A)	Visheshstar-vaikalpik-Visheshsahityakar- Kabirdas	kabirdakesahityakosamajhana	Kabirdakesahityakosamajhakarunkekavyakivishashtaonkosamajhana
	Prasnpatra-5 Hin-0121	Samanyastar-kathetargadyavidhayein	Kathetargadyavidhaonseparichithona	Kathetargadyavidhaonseparichithokarunkeattonkejana
	Prasnpatra-6 Hin-0122	Vishashstar-Ritikalinkavya	Ritikalinkavya separichitkarana	ritikalinkavyakivisheshtaonkosamajhana
	Prasnpatra-7 Hin-0123	Vishashstar-Bhartiyevampaschhatyakavyashastratathaaloचना	Bhartiyevampaschhatyakavyashastratathaaloचना	Pashchhatyakavyashashtra kevidhsiddhantonevamvadhonkosamajhana
	Prasnpatra-8 Hin-0124(A)	Visheshstar-vaikalpik-Adivasivimarsh	Adivasisahityakosamajhana	Adivasisahityakosamajhakaruskivishashtaonkosamajhana
M.A.ii	Prashnpatra-9 Hin-2310	Samanyastar – mahakavyaaurkhandkavyahandkavya	Mahakavyaaurkhandkavyakipravritticonseparichitkarana	Mahakavyaaurkhandkavyakeswarupkosamajhakarunkivesheshtaonkojana
	Prashnpatra-10 Hin-2320	Vishashstar – Bhashavigyan	Bhashavigyankesiddhantonkosamajhana	Bhashavigyanpramukhantonatathauccharanprakriyakosamajhana
	Prashnpatra-11 Hin-2330	Vishashstar-Hindi sahityakaadievammadhyakal	Hindi sahityakeadievammadhyakal kosamajhana	Hindi sahitya kea di evammadhyakal kosamajhana, vibhinnasahityakonseparichithonaevamunkisahityikpravritticonkosamajhana
	Hin-2340 (C) Prashnpatra-12	Vishashstar-vaikalpik-Hindi patrakarita	Patrakaritaswaruo, paribhasha, mahattvaevamvyaptikosamajhana	Patrakarita itihasa, vyapti, avashyakata, visheshtayeinadiseparichithona
	Prashnpatra-13 Hin-2410	Samanyastar – kavyanatak, naikavita, gazal	kavyanatak, naikavita, gazalkeswarupkosamajhana	kavyanatak, naikavita, gazalkeswarupkosamajhakarunkeattonaurvisheshtaonkojana
	Prashnpatra-14 Hin-2420	Vishashstar – Hindi Bhasha	Hinibhasha, itihasa, adhunikrup, boliyonkosamajhana	Hindi bhashyakeswarupkovistrutrupsesamajhana

	Prashanpatra-15 Hin-2430	Vishashstar-Hindi sahityakaadhunikkal	Hindi sahityakeadhunikalkosamajh ana	Hindi sahyakeadhunikkal separichithonaevamunkisa hityikpravruttiyonkosamajh ana
	Prashanpatra-16 Hin-2440 (C)	Vishashstar- vaikalpik- Anuvadvigyan	Anuvadswaruo, paribhasha, mahattvaevamvyaptikosamajh ana	Anuvadkabhashavaigyanikp akshaevamanuvadkshamat akavikaskarana
F.Y.B.com	Hin (G-1)	Hindi samanya	Sahityakivibhinnavidhaonsepa richitkarana	Patralekhankshamata, bank paribhashikshabdavali, vighyapan, anuvadkshamataviksitkara na
	Hin (G-2)	Hindi samanya	Sahityakivibhinnavidhaonsepa richitkarana	Kavyakopadhakarmanvimul yonkosanjhana

DEPARTMENT OF BOTANY (2017 -18)

Academic Year	Class	Sem	Subject Code	Course Title	Objectives	Outcomes (Students will be able to)
2017-18	F.Y.B.SC	Sem-I	BOT-111	P- I- Bacteria & viruses & Algae	1. To know scope and importance of the discipline.	1. Student aware about plant identification.
			BOT-112	P-II- Plant for human welfare	2. To study plant communities and ecological adaptations	2. They Study growth & development of
		Sem-II	BOT-121	P-I- Fungi, Lichen & Plant pathology	in plants.	plant in nature
			BOT-122	P-II - Industrial Botany	3. To know about conservation of biodiversity.	
			BOT-103	Practical on 111, 112, 121, 122	4. To study the botanical regions of India and vegetation	
					types of Maharashtra.	
2017-18	S.Y.B.SC	Sem-I	BOT-231	P- I - Bryophytes & Pteridophytes		1. Student studies morphological
			BOT-	P-II -	2.To study various	And Anatomical

			232	Morphology of Angiosperm	tissue systems	Struture of the plant
		Sem-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		
2017-18						1.Student Classify & identify the plant
	T.Y.B.SC	Sem - I	BOT - 351	P- I - Cryptogames-I		2. They prepared harbariumes
			BOT - 352	P-II - Angioserm & Taxonomy	1.To know the scope and Importance of Embryology	3. They preserve the plant partes & section
			BOT - 353	P-III - Cell & Molecular Biology	2.To study structure of micro and mega sporangium.	
			BOT - 354	P-IV - Advanced plant Physiology	3.To study pollination, fertilization, Endosperm and Embryogeny.	
			BOT - 355	P-V - Plant Ecology & Phytogeography	4.To give exposure of techniques in embryology	
			BOT - 356.2	P-VI - Ethanobotany		
			BOT - 357	Practical		
			BOT - 358	Practical		
			BOT - 359	Practical		
		Sem -II	BOT - 361	P- I - Gymnoserm & Paleo Botany		
			BOT - 362	P-II - Anatomy Embryology		
			BOT - 363	P-III - Genetic plant Breeding &		

				Evalouation		
			BOT - 364	P-IV - Plant Biotechnology		
			BOT - 365	P-V - Applied Botany		
			BOT - 366.2	P-VI - Medico botany & Pharmacougnoisy		
			BOT - 367	P-I (Pract) (I & III)		
			BOT - 368	P-II (Pract)(II & IV)		
			BOT - 369	P-III (Pract) (V & VI)		
04	Year 2017-18	Semester-I BOT.101 Angiosperm Taxonomy BOT.102 Environmental Botany and Biostatistics BOT.103 Cytogenetics, and Molecular Biology BOT.104 Practical –I (Based on BOT.101) BOT.105 Practical –II (Based on BOT.102 and BOT.103) Semester-II BOT.201 Diversity of Lower Cryptogams 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) Semister III BOT – 3.1 : Gymnosperm and Palaeobotany BOT – 3.2 : Plant Biotechnology and Bioinformatics BOT – 3.32 : Mycology and Plant Pathology Special paper - I BOT – 3.4 : Practical – I (Based on Bot – 301 & 302) BOT – 3.5 : Practical – II (Based on Bot – 331 / 332 / 333/ 334) Semister IV BOT – 4.1 : Developmental Botany BOT – 4.22 : Mycology and Plant Pathology Special paper – II BOT – 4.32 : Mycology and Plant Pathology Special paper – III BOT – 4.4 : Practical – I (Based on Bot – 401) BOT – 4.5 : Practical – II (Based on Bot – 421 & 431 /Bot – 422 & 432 / Bot –			i) To study the nature and its co-relation with human society. ii) To study the impact of human activities on environment. iii) To understand global issues concerned with environment. iv) To understandthe sustainable development and care of environment. vi) To understand the connection between material wealth & resources exploitation	

DEPARTMENT OF ZOOLOGY (2017-18)

Academic Year	Class	<u>Course title</u>	<u>Objective</u>	<u>Outcome</u>
2017 - 18	F.Y.B.Sc Sem-I	P-I Zoo 111 Non chordate	To enhance the knowledge of invertebrates	Students get knowledge and information of invertebrates.
		P-II Zoo 112 Cell Biology	To develop subject interest among students	Students get knowledge and information of Cells and tissues in organs.
		P-III Zoo 103 Practical	Practical awareness of subject knowledge.	Students get knowledge and information of practical applications of subject.
	Sem-II	P-I Zoo 121 Chordate –I	Awareness of scientific knowledge of chordates among students.	Students get knowledge and information of Chordates and their uses.
		P-II Zoo 122 Applied Zoology	To knowledge about Applied subjects of Zoology.	Students get knowledge and information of goatary, wormiculture, sericulture, fishery, etc.
		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	To study	Students get knowledge and

		Medical Zoology	about medical importance of animals	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 Chordates II	To study about chordate	Students get 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	Students get knowledge and information of biotechnological

			biotechnology	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 Chordates III	Study of <i>Scoliodon</i> & its study	Students get knowledge and information of vertebrates, types and importance.
		P-II Zoo 362 General Embryology	Study of gametes, fertilization etc.	Students get knowledge and information of gametes, fertilization, its types and importance.
		P-III Zoo 363 Mammalian Histology & Physiology	To study about mammalian tissue and its function	Students get knowledge and information of mammalian histology and its function
		P-IV Zoo 364 Research Methodology	How the research are done and methods of data analysis	Students get knowledge and information of research, research design, sampling etc
		P-V Zoo 365 Micro technique	Study of micro techniques scope & applications	Students get knowledge and information of microtechniques, washing dehydration clearing, staining etc
		P-VI Zoo 366 Applied Zoology III(Vermiculture, Poultry, & Fisheries	Study on vermiculture, poultry & fisheries	Students get knowledge and information of vermiculture, poultry and fisheries etc.
		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	Practical	Students get knowledge and

		related to 362 & 365	awareness of subject knowledge.	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 (2017-18)

Chemistry		
Class	Course	Outcomes (Students will be able to)
FY B.Sc.	CH-111: Physical and Inorganic Chemistry	<ul style="list-style-type: none"> • Develop an ability to use conceptual and mathematical tools to express and predict atomic and molecular behavior
		<ul style="list-style-type: none"> • Predict atomic structure, chemical bonding or molecular geometry based on accepted models.
		<ul style="list-style-type: none"> • Convert scientific equation in straight line to get physical parameter for slope and intercept.
		<ul style="list-style-type: none"> • Understand deviation of real gas from ideal behavior.
		<ul style="list-style-type: none"> • Understand critical constant and vanderwall"s constant.
	CH-112: Organic and Inorganic Chemistry	<ul style="list-style-type: none"> • Understand the general properties of organic compounds, applications of organic compounds.
		<ul style="list-style-type: none"> • Understand the Mono functional compounds - Common and IUPAC nomenclature of various type of organic compound.
		<ul style="list-style-type: none"> • Understand the the alkane by many organic reaction.
		<ul style="list-style-type: none"> • Understand of S- block Elements of alkali metals and Alkaline earth metals
		<ul style="list-style-type: none"> • Understand Arrhenius theory, Bronsted- Lowry theory, and Lewis theory.
		<ul style="list-style-type: none"> • Understand ionic product of water, Buffer solutions.
	CH-113: Chemistry Practical	
		<ul style="list-style-type: none"> • Understand the determination of heat of solution, equivalent weight,

		surface tension etc.
		<ul style="list-style-type: none"> • Carry out qualitative analysis of acidic and basic radicals.
		<ul style="list-style-type: none"> • Learn the applications of types of titrations for various estimations
	CH-121: Physical and Inorganic Chemistry	<ul style="list-style-type: none"> • Identify methods and instruments that can be used to study chemistry
		<ul style="list-style-type: none"> • Evaluate data generated by experimental methods for chemical characterization.
		<ul style="list-style-type: none"> • Carry out quantitative analysis by volumetric method
		<ul style="list-style-type: none"> • To understand specific and equivalent conductance.
		<ul style="list-style-type: none"> • To understand cell constant and use of it to obtain specific and equivalent conductance.
		<ul style="list-style-type: none"> • To know Kohlrausch's law and application of it.
		CH-122: Organic and Inorganic Chemistry
		<ul style="list-style-type: none"> • understand the preparations, reactions and properties of Monohalogen and Dihalogen derivatives of Alkane.
		<ul style="list-style-type: none"> • understand the preparations, reactions and properties of Alcohol, Ether and Epoxide.
		<ul style="list-style-type: none"> • understand the preparations and reactions of carbonyl group.
		<ul style="list-style-type: none"> • understand the preparation of carboxylic acids.
		<ul style="list-style-type: none"> • determine the Molecular weight, formula weight, equivalent weight of organic compounds.
		<ul style="list-style-type: none"> • Understand the Electronic structures, size of atoms and ions, ionization energy, metallic and nonmetallic of p block elements.
	CH-123: Chemistry Practical	
		<ul style="list-style-type: none"> • Carry out quantitative analysis by instrumental method using Conductometer.
		<ul style="list-style-type: none"> • estimate of aniline / phenol.
		<ul style="list-style-type: none"> • Perform qualitative analysis of organic compounds.
		<ul style="list-style-type: none"> • Carry out quantitative analysis by volumetric method and gravimetric methods
SY B.Sc		
	CH 231: Physical and inorganic chemistry	<ul style="list-style-type: none"> • Understand the Electronic structures, size of atoms and ions, ionization energy, metallic and nonmetallic of d block elements.
		<ul style="list-style-type: none"> • Understand concept of Helmholtz free energy
		<ul style="list-style-type: none"> • Understand numerical calculations of Gibbs free energy.
		<ul style="list-style-type: none"> • Understand concept of vapor pressure of liquids.
		<ul style="list-style-type: none"> • Understand the concept of physical properties of metals
		<ul style="list-style-type: none"> • Learn methods of purification of ores.

	CH 232: Organic and analytical chemistry:	<ul style="list-style-type: none"> • Review the concept of isomers and discuss the isomer which results from free rotation of C-C single bond, from a chirality, from restricted rotation, R, S and E, Z nomenclature.
		<ul style="list-style-type: none"> • Study of amines their formation reactivity.
		<ul style="list-style-type: none"> • Study of reactivity, preparation and reactions of organo Li, Cu, Zn compounds.
		<ul style="list-style-type: none"> • Understand the importance of analytical chemistry in analysis of compounds by titrimetric, gravimetric and instrumental methods.
		<ul style="list-style-type: none"> • Know the importance of sampling methods and ways of interpretation of results of analysis.
		<ul style="list-style-type: none"> • Determine the causes of errors and their minimization during analysis
		<ul style="list-style-type: none"> • Learn the application of types of titrations for quantitative analysis of the samples.
	CH 233: Chemistry practical:	<ul style="list-style-type: none"> • Understand techniques chromatography for separation of components in the mixture.
		<ul style="list-style-type: none"> • Understand recrystallization for purification of organic compounds.
		<ul style="list-style-type: none"> • Prepare various inorganic complexes.
		<ul style="list-style-type: none"> • analyse compounds by titrimetric, gravimetric and instrumental methods..
		<ul style="list-style-type: none"> • Understand to determine thermodynamic parameter.
	CH 241 Physical and inorganic chemistry	<ul style="list-style-type: none"> • Understand colligative properties and its application calculation of molecular weight of solutes
		<ul style="list-style-type: none"> • Understand concept of electromotive force and its measurement
		<ul style="list-style-type: none"> • Understand about properties of Lanthanides and actinides.
		<ul style="list-style-type: none"> • Understand concept of s-s, s-p, p-p, p-d & d-d combination of orbitals.
		<ul style="list-style-type: none"> • Understand about classification of electrodes.
		CH 242: Organic and analytical chemistry
		<ul style="list-style-type: none"> • Understand the synthesis and reaction of 5, 6 member and condensed heterocyclic systems.
		<ul style="list-style-type: none"> • Understand the synthesis of synthetic reagents and their synthetic utility.
		<ul style="list-style-type: none"> • Know the mechanism and stereochemistry of E1, E2 reaction.
		<ul style="list-style-type: none"> • Understand the concept of quantitative analysis by gravimetric methods.
		<ul style="list-style-type: none"> • Understand the concept for separation of analytes in samples by thin layer, paper and column chromatographic methods.
	CH 243: chemistry practical:	<ul style="list-style-type: none"> • Carry out qualitative analysis of organic compounds.
		<ul style="list-style-type: none"> • Determine molecular weight by depression of freezing point method.

		<ul style="list-style-type: none"> • Handle landsbergers apparatus for determination of molecular weight.
		<ul style="list-style-type: none"> • Estimate of Nickel and Barium gravimetrically.
		<ul style="list-style-type: none"> • Make use of potentiometer for determination of standard electrode potential.
T.Y.B.Sc	CH 351: Physical chemistry	<ul style="list-style-type: none"> • Understand spontaneous and non spontaneous processes.
		<ul style="list-style-type: none"> • Understand the importance of salt bridge in electrochemical cell.
		<ul style="list-style-type: none"> • Understand the concept electrochemical cell and determination of potential of cell
		<ul style="list-style-type: none"> • Understand the laws of photochemistry (Grothus Draper Law and Stark Einstein law)
		<ul style="list-style-type: none"> • Understand the concept quantum yield and fluoresce and phosphorescence from Jablonski diagram.
		<ul style="list-style-type: none"> • Understand the various devices to measure the radiation from radioactive sample.
	CH-352: Inorganic chemistry	<ul style="list-style-type: none"> • Understand the basic concept of the co-ordination compound, and identify the types of given ligand, chelates.
		<ul style="list-style-type: none"> • Understand the different physical method for the study of complexes and assumptions, drawbacks and isomerism in Werner's theory.
		<ul style="list-style-type: none"> • Understand Effective atomic number (EAN) and how to calculate EAN for any given complexes.
		<ul style="list-style-type: none"> • Understand the modern theories of metal-ligand bond related to valence bond theory.
		<ul style="list-style-type: none"> • Application of CFT related to different geometry e. Square planer, tetrahedral, Octahedral.
		<ul style="list-style-type: none"> • Understand the basic concept about CFT e. Spin magnetic moment, crystal field stabilization energy related to weak and strong field, limitation of theory.
		<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Understand Polarity picture of carbonyl group and nucleophilic addition reaction to it.
		<ul style="list-style-type: none"> • Introduction concept of aromaticity electrophilic and nucleophilic aromatic substitution reaction.
		<ul style="list-style-type: none"> • Molecular rearrangement involving migration to C, N and Oxygen.
		<ul style="list-style-type: none"> • Drawing the resonating structures.
		<ul style="list-style-type: none"> • Understand Nuclophic substitution reactions.
		<ul style="list-style-type: none"> • Understanding electrophilic addition reactions.
	CH-354:	<ul style="list-style-type: none"> • Understand procedure of extraction of metal ions using Solvent

	Analytical Chemistry SEM V	Extraction process.
		<ul style="list-style-type: none"> • Understand the application of Ion Exchange Chromatography method for the separation of cations and anions using different types of resins.
		<ul style="list-style-type: none"> • Understand applications of Size Exclusion Chromatography for the separation of analytes based on their size and shapes.
		<ul style="list-style-type: none"> • Understand the working of Gas Chromatographic unit and apply the knowledge to separate volatile compounds in sample.
		<ul style="list-style-type: none"> • Understand Principle, choice of column materials for HPLC and its application.
		<ul style="list-style-type: none"> • Understand Principles of Electrophoresis and choice of techniques of electrophoresis for various applications
	CH-355: Industrial chemistry	<ul style="list-style-type: none"> • understand general concept of Industrial chemistry.
		<ul style="list-style-type: none"> • Understand manufacturing of sugarcane.
		<ul style="list-style-type: none"> • understand general idea of differ physical methods used in manufacturing.
		<ul style="list-style-type: none"> • understands various types of fertilizer.
		<ul style="list-style-type: none"> • Understand manufacturing of Beer and spirit.
		<ul style="list-style-type: none"> • understand the aspects of small scale industry.
	CH 356: B Environmental chemistry	<ul style="list-style-type: none"> • Understand the concept to awareness about environmental chemistry
		<ul style="list-style-type: none"> • Understand the concept about atmosphere and different layer and composition
		<ul style="list-style-type: none"> • Understand the concept. awareness about air pollution and organic inorganic pollutants
		<ul style="list-style-type: none"> • Understand the concept, water pollution and domestic sewage waste water, industrial pollution agriculture pesticide water pollution.
		<ul style="list-style-type: none"> • Understand the different methods of water treatment, water effluents and sewage water.
		<ul style="list-style-type: none"> • Understand the green house gases and global warming.
	CH-357,367: Physical Chemistry Practical	<ul style="list-style-type: none"> • Prepare molar and normal solutions of various concentrations.
		<ul style="list-style-type: none"> • determine concentration of unknown solutions by Spectrophotometric method.
		<ul style="list-style-type: none"> • Measure the pH, pKa and Ka of various acids by potentiometry.
		<ul style="list-style-type: none"> • Measure refractive index, molar refraction and unknown concentration of various solvents.

		<ul style="list-style-type: none"> • Determine the molecular weight of a given polymer by turbidimetry.
		<ul style="list-style-type: none"> • Investigate the reaction rate.
	CH 358,368: Inorganic practical	<ul style="list-style-type: none"> • estimate ores and alloy by gravimetric and volumetric method.
		<ul style="list-style-type: none"> • Separate and analyze binary mixtures by qualitative method
		<ul style="list-style-type: none"> • Prepare and determine percent purity of various inorganic complexes.
		<ul style="list-style-type: none"> • Perform chromatographic technique (paper chromatography).
		<ul style="list-style-type: none"> • Estimate Lead, Iron by gravimetric method.
		<ul style="list-style-type: none"> • Estimate Titanium and Iron by Spectrophotometric method.
	CH 359,369: Organic practical:	<ul style="list-style-type: none"> • Separate and analyze binary water insoluble mixture
		<ul style="list-style-type: none"> • Separate and analyze binary water soluble mixture
		<ul style="list-style-type: none"> • Estimate - acetamide, glucose by volumetric method
		<ul style="list-style-type: none"> • Estimate basicity of various acids.
		<ul style="list-style-type: none"> • Prepare various organic compounds.
		<ul style="list-style-type: none"> • Understand Thin Layer Chromatographic techniques and physical constant.
	T.Y.B.Sc Sem VI CH-361: Physical chemistry.	<ul style="list-style-type: none"> • Understand the types of spectra, Rotational, Vibration and Electronic energy levels.
		<ul style="list-style-type: none"> • difference between order and Molecularity
		<ul style="list-style-type: none"> • Understand the first, second and third order reaction.
		<ul style="list-style-type: none"> • Understand the concept anisotropic, isotropic, etch figure, polymorphism,
	CH-362: Inorganic chemistry	<ul style="list-style-type: none"> • understand the electronic structure, Extraction uses, oxidation states biological role of Cu.
		<ul style="list-style-type: none"> • know about the all basic theory of Acid and bases.
		<ul style="list-style-type: none"> • understand the concept of Hard and Soft acid bases concept theories, application and limitations.
		<ul style="list-style-type: none"> • know the different types and theories of Corrosion and how to protect Metal from corrosion.
	CH-363: Organic chemistry	<ul style="list-style-type: none"> • Understands common terms in spectroscopy.
		<ul style="list-style-type: none"> • Learn Physical methods of structure determination which includes IR, UV and NMR.
		<ul style="list-style-type: none"> • Solve the problems based on IR, UV and NMR.
		<ul style="list-style-type: none"> • understand retro synthesis.
		<ul style="list-style-type: none"> • predict synthons and reagents.

		<ul style="list-style-type: none"> • Solve the problems based on retro synthesis.
	CH-364 Analytical Chemistry	<ul style="list-style-type: none"> • perform the analysis of samples using instrumental methods
		<ul style="list-style-type: none"> • understand the concepts of spectrometry, know the principles of instruments and their applications
		<ul style="list-style-type: none"> • understand principle, working and applications of Flame and Plasma Emission Spectrometry.
		<ul style="list-style-type: none"> • understand principle, Instrumentation and application of Atomic Absorption Spectrophotometry
		<ul style="list-style-type: none"> • understand principle, Instrumentation and applications of Turbidimetry and Nephelometry.
	CH-365: Industrial chemistry	<ul style="list-style-type: none"> • Understand the process of manufacturing of petrol and gasoline.
		<ul style="list-style-type: none"> • Understand the process of manufacturing of methanol.
		<ul style="list-style-type: none"> • Understand the process of manufacturing of soap.
		<ul style="list-style-type: none"> • Understand the process of manufacturing of detergents.
		<ul style="list-style-type: none"> • Understand classification of dyes and paints.
		<ul style="list-style-type: none"> • Understand properties of drugs.
	CH 366: Polymer chemistry	<ul style="list-style-type: none"> • Understand the basic concepts of polymerization.
		<ul style="list-style-type: none"> • Understand the different methods of polymerization.
		<ul style="list-style-type: none"> • Understand various techniques of polymerization.
		<ul style="list-style-type: none"> • Understand the preparation, properties and applications of PE, PVC, Polystyrene, polyacrilonytrile,
		<ul style="list-style-type: none"> • Understand the concept Glass transition temperature
	M.Sc. Part I:	
	CH-P-110: Physical Chemistry I	<ul style="list-style-type: none"> • Understand the terms eigen function, eigen value, operator and postulates of Quantum mechanics.
		<ul style="list-style-type: none"> • Understand mechanics of particle in one, two and three dimensional box.
		<ul style="list-style-type: none"> • Learn parent –daughter relationship, application of radioactivity, NAA, IDA. Effect of radiation and units of radiation.
		<ul style="list-style-type: none"> • Learn the Fricke and cerric sulphate dosimeter.
		<ul style="list-style-type: none"> • Understand the terms ionic strength, activity coefficient .DHO equation.
		<ul style="list-style-type: none"> • Understand the adsorption of gases by solid types of isotherms.
	CH130:	<ul style="list-style-type: none"> • Learn molecular orbitals and its orientation.

	Inorganic chemistry Paper I	
		<ul style="list-style-type: none"> • Understand about geometry and shape of the molecule
		<ul style="list-style-type: none"> • Learn and find out bond order and dipole moments of the inorganic molecule.
		<ul style="list-style-type: none"> • Learn 18 electron rule and application.
		<ul style="list-style-type: none"> • Determine the point group of inorganic molecules.
	CH -150 :Basic Organic Chemistry	<ul style="list-style-type: none"> • understand stereo chemical principles, enantiomeric relationship R and S ,E and Z nomenclature in C,N,S,P containing compound.
		<ul style="list-style-type: none"> • understand SN1, SN2 and SNi mechanism and stereochemistry.
		<ul style="list-style-type: none"> • understand NGP by pi and sigma bonds, classical and non -classical carbocations .
		<ul style="list-style-type: none"> • understand alkylation and acylation reaction .
		<ul style="list-style-type: none"> • Learn and solve problem type of elimination
	CH-P-210: Physical Chemistry II	<ul style="list-style-type: none"> • Understand the thermodynamic description of mixtures state function, exact, inexact differential.
		<ul style="list-style-type: none"> • Understand the colligative properties of solutions, depression in f.p., elevation in b.p, osmotic pressure.
		<ul style="list-style-type: none"> • Understand the statistical thermodynamics and various partition functions.
		<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Understand about structure of atom, Hunds rule, Term symbol, calculation of microstates, orbital selection rule.
		<ul style="list-style-type: none"> • learn mechanism in transition metal complexes.
		<ul style="list-style-type: none"> • Learn radius ratio rule of coordination no 3,4,
		<ul style="list-style-type: none"> • Understand the Born-Haber cycle to calculate lattice energy.
	CH-250 Name Reactions, Synthetic Organic Chemistry & Spectroscopy	
		<ul style="list-style-type: none"> • learn various name reaction with example.
		<ul style="list-style-type: none"> • use synthetic reagents of oxidation and reduction for solving the example.
		<ul style="list-style-type: none"> • understand mechanism of rearrangements reaction .
		<ul style="list-style-type: none"> • interpret IR spectra on basic values IR frequencies
		<ul style="list-style-type: none"> • learn factors affecting on UV absorption spectra.

	CH-290-General Chemistry	
		<ul style="list-style-type: none"> • Solve the problems on Chemometrics Mean and Standard deviation.
		<ul style="list-style-type: none"> • Learn theory of electrogravimetric analysis, Electrolytic separation and determination of metals.
		<ul style="list-style-type: none"> • Know Instrumentation, choice of Mobile Phase, Solvent Treatment systems, Pumping systems, Sample injection systems, Columns for High Performance Liquid Chromatography.
		<ul style="list-style-type: none"> • 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.
		<ul style="list-style-type: none"> • Learn Voltammetric Electrodes, Detectors, Amperometric Sensors, Amperometric Titrations.
	CH-P-1 : Physical Chemistry Practical	<ul style="list-style-type: none"> • prepare molar and normal solutions of various concentrations.
		<ul style="list-style-type: none"> • determine concentration of unknown solutions and degree of hydrolysis and hydrolysis constant by Spectrophotometry.
		<ul style="list-style-type: none"> • Determine stability constant of a complex ion and standard free energy change ΔG^0 and equilibrium constant by potentiometry.
		<ul style="list-style-type: none"> • investigate the rate constant for depolymerization , energy of activation and order of the reaction
	CH: I-1: Practical course Inorganic chemistry:	<ul style="list-style-type: none"> • Perform gravimetric and volumetric analysis ores.
		<ul style="list-style-type: none"> • Analyse binary mixtures by gravimetric and volumetric method.
		<ul style="list-style-type: none"> • Prepare various inorganic complexes and determination of its Percent purity.
		<ul style="list-style-type: none"> • analyse iron from given drug sample and calcium in milk sample.
		<ul style="list-style-type: none"> • Perform paper chromatographic technique.
	CH –O- 1 Organic Chemistry practical	<ul style="list-style-type: none"> • Know uses of chemistry software"s like ISI draw, chem Draw, Chem sketch.
		<ul style="list-style-type: none"> • draw the different structure of organic compound.
		<ul style="list-style-type: none"> • perform Thin layer chromatography technique for completion of reaction.
		<ul style="list-style-type: none"> • perform single and two stage preparation.
		<ul style="list-style-type: none"> • Make use of soxhlet extractor and steam distillation assembly for Purification of organic compound.
	M.Sc. II	
	Organic CH 350:	<ul style="list-style-type: none"> • Compare the major and minor product of variety of organic reaction.

	Organic Reaction Mechanism	
		<ul style="list-style-type: none"> • Understand accepted mechanism of organic reaction including all intermediates
		<ul style="list-style-type: none"> • Solve the problems on Taft and Hammett constant.
		<ul style="list-style-type: none"> • Understand Concave upward and downward deviation.
		<ul style="list-style-type: none"> • Learn the type"s hydrolysis of ester.
	CH-351: Spectroscopic Methods in Structure Determination	
		<ul style="list-style-type: none"> • Understand principle and instrumentation of ¹H NMR, ¹³C NMR and Mass spectroscopy.
		<ul style="list-style-type: none"> • Investigate structures on these techniques.
		<ul style="list-style-type: none"> • Resolve structure of organic compounds by 2D NMR techniques.
		<ul style="list-style-type: none"> • Analyze reaction sequences by using spectroscopic technique.
	CH-352 (Organic stereochemistry)	<ul style="list-style-type: none"> • Understand the basic concepts of stereo chemistry
		<ul style="list-style-type: none"> • assign structure of organic molecules.
		<ul style="list-style-type: none"> • learn Three dimensional structure of cyclic and acyclic compounds
		<ul style="list-style-type: none"> • Use selectivity of reagents for chemical reactions.
	CH-353: Free radical, photochemistry, pericyclic reaction and their applications	
		<ul style="list-style-type: none"> • Understand term quantum yield, and electronic states and transitions in molecules.
		<ul style="list-style-type: none"> • Understand Norrish-I and Norrish-II cleavages, Paterno-Buchi reaction.
		<ul style="list-style-type: none"> • Understand Photochemistry of olefins and arenes: 1, 2- , 1, 3- and 1, 4- additions.
		<ul style="list-style-type: none"> • Understand free radical reaction contain Halogen, Sulphur, and, Selenium Group transfer reaction.
	CH-450: Chemistry of Natural Products	<ul style="list-style-type: none"> • know concept of biogenesis of natural products.
		<ul style="list-style-type: none"> • Classify sources of various vitamins.
		<ul style="list-style-type: none"> • Learn biological importance of vitamins B1, B2, B6, folic acid, B12, C, D1, E, K1, and K
		<ul style="list-style-type: none"> • Understand and apply the role of enzyme in reactions.
		<ul style="list-style-type: none"> • Synthesize natural organic compounds by chemical methods.
		<ul style="list-style-type: none"> • Learn the stereochemistry of natural product.
	CH-451:	<ul style="list-style-type: none"> • Understand Transition metal complexes in organic synthesis, Grubb"s

	Synthetic Methods in Organic Chemistry	catalyst, Ziegler Natta catalyst.
		<ul style="list-style-type: none"> • Design the organic compounds by use of synthetic reagents
		<ul style="list-style-type: none"> • Understanding role of Umpolung in organic synthesis.
		<ul style="list-style-type: none"> • Understanding Protection and deprotection in the synthesis of polypeptide and polynucleotide.
		<ul style="list-style-type: none"> • Know basic principles of green chemistry and design green synthesis.
		<ul style="list-style-type: none"> • Use ecofriendly green reagents, solvents, catalysts and reaction conditions.
	CH-452: Heterocyclic chemistry, Chiron approach, chiral drugs and medicinal chemistry.	
		<ul style="list-style-type: none"> • Know the main synthetic routes and reactivity for variety of heterocyclic compounds and applications.
		<ul style="list-style-type: none"> • Understand Important Terms –Receptor, therapeutic index, bioavailability, Drug assay and Drug Potency used in medicinal chemistry.
		<ul style="list-style-type: none"> • Understand Structure of triose, Pentose, hexose, Stereochemistry and reaction of Glucose.
		<ul style="list-style-type: none"> • Understand Synthesis and Pharmacological activity of S-Ibuprofin , S-Metaprolol, (+) Ephedrine
		<ul style="list-style-type: none"> • Understand basic Pharmacokinetics of drugs, anti Microbial drugs, Antifungal, Antibacterial, antiviral, antiprotozoals.
	CH-O2 (organic Practical chemistry MSc II)	
		<ul style="list-style-type: none"> • separate organic compounds in different phases.
		<ul style="list-style-type: none"> • perform qualitative test to analyze functional group of organic compounds.
		<ul style="list-style-type: none"> • learn distillation technique.
		<ul style="list-style-type: none"> • detect elements N, S, and X in organic compounds.
		<ul style="list-style-type: none"> • use purification techniques of organic compounds .
	CH -O-3: Three stage preparations	<ul style="list-style-type: none"> • perform three stage preparation.
		<ul style="list-style-type: none"> • draw the reaction mechanism.
		<ul style="list-style-type: none"> • Purify the organic compounds by crystallization.
		<ul style="list-style-type: none"> • Perform chromatographic technique to check completion of reaction.
		<ul style="list-style-type: none"> • Apply the knowledge about different reaction conditions.
	CHO-4: Short Research Project	
		<ul style="list-style-type: none"> • survey literature for the topic of the project.
		<ul style="list-style-type: none"> • Learn to apply reaction conditions for synthesis, isolation of product and give mechanism.
		<ul style="list-style-type: none"> • Handle instruments for analysis and discuss their experimental results.
		<ul style="list-style-type: none"> • 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.
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DEPARTMENT OF COMMERCE (2017-18)

F. Y · B · C o m	Modern Office Management	<ul style="list-style-type: none"> • Students will be aware about modern office management concept • Students will be able to understand office appliances • 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 digital appliances related to modern office management. • Students will be able to office work in office
	Financial and Cost Accounting	<ul style="list-style-type: none"> • Students will be aware about piecemeal distribution of cash. • 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.
	Quantitative Techniques & Computing skill	<p>Students will be able to understand the statistics technique on quantitative data</p> <ul style="list-style-type: none"> • Students will be able to understand mean, median, Mode, Quartile Deviation, Range, Percentile etc. • Students will be able to understand the logic and resining in the market situation. • Students will be able to work on tally in the office.
	Marketing & Advertising	<p>Students will be able to understand marketing techniques</p> <ul style="list-style-type: none"> • Students will be able to understand adverting techniques.

		<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<p>Students will be able to understand corporate accounting of companies.</p> <p>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</p>
	Business & Tax Laws	<ul style="list-style-type: none"> • 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.
	Computing Management and business communication	<ul style="list-style-type: none"> • 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

		<p>business communication .</p> <ul style="list-style-type: none"> • Students will be able to understand the business communication process and business letter
	Business Entrepreneurship	<ul style="list-style-type: none"> • 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	<p>To acquaint students with the new concepts of Banking.</p> <p>To update the students about new changes in Banking.</p> <p>To know the relevance banking practices in modern competitive world.</p> <p>To make understandable of banking operations.</p>
	Retail Management	<p>To introduce basic Retail Management Concepts.</p> <p>Empowering students with the most modern techniques and practices of Retailing seen and experienced around the globe.</p> <p>To learner will be able to determine a level of interest in pursuing carrier in Retail Management.</p>
T.Y. B.Co m	Principles & Practices of Auditing	<p>To understand the audit concepts, objectives, principles, advantages and disadvantages, auditing related with other subject.</p> <p>To understand the types of audit ,Audit Programme, Documentations, Evidences, Vouchers, Vouching, Verification and Valuation</p> <p>To understand the student internal control system, Audit of Limited Companies in India and Audit Report.</p>
	Human Resource Management	<p>To understand the concept of Human resource management</p> <p>To introduce the concept, principles, and practices of HRM to the students.</p> <p>To familiarise students with concepts of human resource planning, job analysis, recruitment and selection procedures.</p>
	Income Tax & competitive Skill	<p>The student will be able to know the various provisions relating to income and income tax computation.</p>

		<p>Understand the basic concept of Income tax Act 1961 and get the elementary knowledge of scheme of taxation in India.</p> <p>Compute income and tax of an individual assesses under the tax.</p> <p>Development the Competitive Skill among commerce students.</p>
	Import & Export Management	<p>To understand the concept of Import & Export management</p> <p>To introduce the concept, principles, and practices of Import & Export to the students.</p> <p>To make able to commerce students for Import & Export trade</p>
	Advanced Accounting I	<p>To understand the concepts of farm accounting, Computerized Accounting , Goodwill ,insolvency, Shares,</p>
	Advanced Accounting II	<p>To understand the concept of amalgamation, Absorption, Internal Reconstruction and External Reconstruction, Bank Final Account, Analysis of Financial statement, Ratio Analysis.</p>