Nehru Yuva Krida & Sanskrutik Mandal, Chikhli's

Late. Bhaskarrao Shingane Arts, Prof. Narayanrao Gawande Science & Ashalata Gawande Commerce College

Lavala Road, Sakharkherda. Tq. Sindkhed Raja, Dist. Buldana (M.S.) - 443202

Prof. N. S. Gawande
Secretary

Dr. N. N. Gawande
Principal

| College Code No. 336 | Contact No. 9822364082 | Fax : 07264-266211 | Email - lbsac336@sgbau.ac.in |

Ref. No.   Date :

Criteria II – Teaching learning and Evaluation.

2.6.1: Teachers and students are aware of the stated Programme and courseoutcomes of the Programmes offered by the institution.

Sr.No.	Metric No.	Document Details
1		Co's for all programmes an abstract
2	2.6.1	Program outcomes (POs) Program specific outcomes(PSOs) and course outcome of UG and PG

PRINCIPAL
Late Bhaskarrao Shingane Arts,
Prof. Narayanrao Gawande Science &
Ashalata Gawande Commerce College
Sakharkherda. Tq $ Rate Dist Buldana

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Ref. No.   Date :

COs for all courses (exemplars from Glossary)

Programme Code	Programme Name
LBSAC B.A.	B.A. in English,Marathi,Litreture,History,Sociology,Political Science,Home Economics,Urdu, Hindi,Pali and Prakrit,Library and Information Science , Human Rights.
LBSAC B.Com.	Bachelor of Commerce
LBSAC B.Sc.	B.SC in Physics, Chemistry, Mathematics,Zoology ,Botany,Computer Science,Electronics
LBSAC B. Voc B	Bachelor of Vocational in Banking and Financial Services
LBSAC B. Voc P	Bachelor of Vocational in Pharmacy Assistant
LBSAC B. Voc H	Bachelor of Vocational in Healthcare
LBSAC M.A. MAR	Master of Arts (Marathi)
LBSAC M.A. SOC	Master of Arts (Sociology)
LBSAC M.Sc CHE	Master of Science (Chemistry)
LBSAC M.Sc BOT	Master of Science (Botany)
LBSAC M.Sc MTH	Master of Science (Mathematics)
LBSAC M.Sc PHY	Master of Science (Physics)
LBSAC M.Sc ZOO	Master of Science(Zoology)

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Sakharkherda, Tq. S Raja Dist Buldana

Late B. S. Arts, Prof. N. G. Science and A. G. Commerce College, Sakharkherda

Course Outcomes (CO's) of Arts Stream

English		
Class	Course	Course Outcome (Student will able to……….)
B.Sc. I, 1S	English	➢ Knowledge of Indian culture and enhance Humanity among students. ➢ Development of patriotism and self- respect within student. ➢ Development of virtues within pupils. ➢ Information and important of water, RTI to information act 2005. ➢ Development of hopefulness, spirit of life. ➢ Importance of nature, environmental balance. ➢ Preparation of parts of speech, tenses. ➢ Revision of sentences and its transformation.
B.Sc. I, 2S	English	➢ Enhancement of courage, social harmony within students. ➢ Precautions of food coloring. ➢ Information about human psychology. ➢ Development of optimism, faith in goodness, mercy. ➢ Information of human estrangement in man-made world, Effects of Materialism. ➢ Ability to write Resumes and Job application. ➢ Proper use of language lab for pronunciation. ➢ Group discussion of the students.
B.Com. I, 1S	English	➢ Knowledge of social bonds and relationship. ➢ Understand the busy life in materialistic world. ➢ Knowledge of nature and different personality. ➢ Study the divine nature, artificial attitude of the people. ➢ Ability to write professional resume, Job application. ➢ Use of Tense, Articles and Narration.
B.Com. I, 2S	English	➢ Study the philosophy of Swami Vivekananda. ➢ Tagore's story on Human relationship. ➢ Understand the thought of Dr Ambedkar on democracy, caste system ➢ Understand the importance of happiness, perseverance for dream. ➢ Ability to write E-mail, Newspaper report.

		➤ Understand the Change the voice, Preposition, Idioms and Phrases, One word substitutions.
B.Com.II, 3S	English	➤ Importance of traveling in various regions. ➤ Study the A.J. Cronin's Two Gentlemen of Verona. ➤ Understand the importance of love; everyone must give to the world. ➤ Importance of education, faith, bravery, enthusiasm. ➤ Understand the human in the context of nature, value of nature. ➤ Understand the communication, Ability of presentation. ➤ Knowledge of Agendas, Notices and Minutes.
B.Com.II, 4S	English	➤ Knowledge of urban India and social bonds of the society. ➤ To study Florence Nightingale. ➤ Understand the relation between husband and wife. ➤ Understand the religious beliefs of the people. ➤ Knowledge of Poet's emotions, alienation effect. ➤ Study the hunger of materialistic life, optimism ➤ Understand the Interview and Interview skills, Meeting skills and Non-verbal Communication.
B.Com.III,5S	English	➤ Understand the life of Ratan Tata. ➤ To know the creative mind of Steve Jobs. ➤ To know the dream of Vijay Bhatkar. ➤ To understand the side effects of black economy. ➤ To know the beauty of the love and nature. ➤ To understand the value of equality. ➤ To understand the natural elements represents love. ➤ To know the value of garden in our life. ➤ To know the computing skill. ➤ To teach public speaking.
B.Com.III,6S	English	➤ Understand the life of Sundar Pichai. ➤ To know the Mallika Shrinivasan's TAFE. ➤ To know the work of Muhammad Yunus. ➤ To understand the RTI Act 2005. ➤ To know the beautiful stages of human life. ➤ To understand the importance of love in our life. ➤ To know the fable and metaphorical meaning of the poem. ➤ To know the beauty of nature specially in the autumn. ➤ To learn the soft skills. ➤ To know importance of advertising.
B.A. I, 1S	Compulsory English	➤ It gives importance of education in life. ➤ Understand the value of love in our life. ➤ To know the vision of Independent India. ➤ Understand the film making and business. ➤ Knowledge about Indian market and its variety as per diversity of Indian population. ➤ To know the importance of physical beauty as well as spiritual

		and intellectual beauty. ➢ Understand the anguish of woman. ➢ Understand the parts of speech and tenses. ➢ To know how to write the personal and business letters and CV.
B.A. I, 2S	Compulsory English	➢ Understand the value of simplicity and vision. ➢ To know the values of public speaking and hard work. ➢ Importance of moral values. ➢ To know the values of equal society. ➢ Understand the importance of peace, brotherhood, equality. ➢ To know the power of almighty. ➢ Knowledge about verbs, verb-agreement. ➢ Understand how to develop story, write Fax, E-mail, notices, agendas and minutes.
B.A. II, 3S	Compulsory English	➢ Understand the cultural gratefulness of India. ➢ To know the values of pleasures in life. ➢ To impart values of charity, sacrifice, and true happiness. ➢ Importance of non-violence. ➢ To know the values of love. ➢ Knowledge and important about good deeds. ➢ Understand the joyfulness in simplicity and innocence. ➢ Knowledge about clauses and sentences. ➢ To develop communication skills- Telephone conversation and Interpersonal conversation.
B.A. II, 4S	Compulsory English	➢ Understand the humanity and social values. ➢ Knowledge about good parenting and morality. ➢ Understand the reality and illusion. ➢ Understand the real value of freedom, truth and fearless nature. ➢ To know the change is the law of nature. ➢ Understand the importance of love in life. ➢ Understand the values of goodness, duty and sacrifice. ➢ Knowledge about transformation and synthesis of sentences. ➢ To develop communication skills- interpersonal conversations and casual conversations.
B.A. III, 5S	Compulsory English	➢ To know the story of Saki 'The open window'. ➢ To understand the real worship of God. ➢ To develop the patriotism, nationalism within the students. ➢ To aware about fathers role in our lives. ➢ To know the Indian women and their feelings. ➢ To aware student about equality which is present in the nature. ➢ To know how to write precise writing. ➢ To understand how to expand the thought.
B.A. III, 6S	Compulsory English	➢ To understand the struggle of craftsmen. ➢ To aware about old people emotions. ➢ To understand the banking with humorous way.

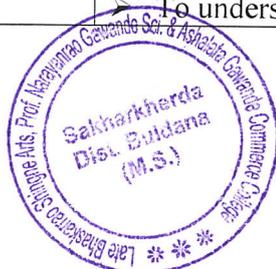|		➢ To know the thought of Socrates.
		➢ To understand the beauty of the nature and countryside.
		➢ To enable students how to keep tranquility of mind.
		➢ To know how to write report writing.
		➢ To understand how to expand our view in to an essay.
B.A. I, 1S	English Literature	➢ To know about the formation of Poetry. ➢ To differentiate between Subjective and Objective Poetry. ➢ To Collect more information about Poetical Types and Stanza form. ➢ To make student aware about famous Poet and poems. ➢ To acquire Knowledge about One Act plays with illustrations. ➢ To make students familiar with Literary Terms and Theory.
B.A. I, 2S	English Literature	➢ To know about Schools and movements in Poetry. ➢ To understand massage in the poetry of Tagore ➢ To understand nature poetry of Robert Frost. ➢ To enjoy and understand one Act plays by Anton Chekhovand O.Henry. ➢ To analysis Literary Theory Orientalism and cultural Studies. ➢ To acquire knowledge about world famous poetry and poets.
B.A. II, 3S	English Literature	➢ To Know and understand Novel Form. ➢ To Know Silent feature of Short Story Writing. ➢ To be familiar with Biography and Autobiography. ➢ To understand poetry of Sarojani Naidu along with other Poets ➢ To know new literary terms used in modern literature. ➢ To understand literary Theories like: Archetypal Criticism, Formalism, Structuralism, and Naratology ➢ To Study Short Stories by Ruskin Bond, R.K.Narayan, Mansfild, etc.
B.A. II, 4S	English Literature	➢ To Know about literary forms such as The Eassy, Criticism and Style. ➢ To understand poems by Nelson, Whitman, Emerson, Melville, and Dickinson. ➢ To identify different literary terms and their meaning. ➢ To Study Post modern Theories: Post Colonialism, Feminism and Psychoanalytic Criticism. ➢ To become Familiar with world famous Essayists. ➢ To know about Bacon, Stevenson and Hazlitt.
B.A. III, 5S	English Literature	➢ To read and analysis the short story, The Open Window by Saki ➢ To read and analysis the short story, The Three Hermits by Leo Tolstoy ➢ To understand the massage from the Essay What is Swaraj? by M K Gandhi ➢ To understand the massage from the Essay A Letter to his Son by Lord Chesterton ➢ To study the poetry and poetic technique of Sarojani Naidu

		➢ To study the poetry and poetic technique of Ralph Waldo Emerson ➢ To develop writing skill with Exercise of Précis Writing and Developing a Thought. ➢ To know about the technique of Personal Interview.
B.A. III, 6S	English Literature	➢ To know about the literary form Tragi- Comedy. ➢ To examine the literary form soliloquy and Aside. ➢ To study the drama form Shakespearean comedy and romance. ➢ To know the poetic technique of Alfred Tennyson ➢ To know more about the poet Arbindo ➢ To study the form Dramatic Monologue with reference to Robert Browning ➢ To study American Poetry with reference to Walt Whitman ➢ To analysis the poetry by John Donne ➢ To study literary terms and their significance ➢ To study the literary theories i. e. Eco-Criticism, Queer Theory and Marxist Criticism. ➢ To study the drama Twelfth Night.
B.A. I, 1S	Compulsory Marathi	➢ Knowledge about Walking. ➢ To know the importance of Education. ➢ Understand the features of VinobaBhave's literature. ➢ To know the importance of inspiration in life. ➢ To introduce a folk Literature . ➢ To understand the life of Farmer and women . ➢ To introduce poets & their works .
B.A. I, 2S	Compulsory Marathi	➢ To inform literature of Swami Vivekanand . ➢ Understand the importance of Marathi language. ➢ To Devolve Scientific View. ➢ To know the importance of Mother. ➢ Understand the Letter Writing. ➢ To introduce poets & their works.
B.A. II, 3S	Compulsory Marathi	➢ To inform literature of Sant Literature . ➢ Understand the importance of Marathi language. ➢ To know the importance of Science. ➢ To know the importance of Animals & Birds. ➢ Understand the honor of women. ➢ To introduce poets & their works.
B.A. II, 4S	Compulsory Marathi	➢ To know the importance of land. ➢ To know the Comparison of Man and Women . ➢ To know about Science. ➢ To know the importance of Mirror. ➢ To introduce the thoughts of Sant Gadge baba. ➢ To understand the sensivity about urban life. ➢ To know the speciality of the poet like Sant Ekanath, Sant Kanhopatra , Rajesh Mahalle, ShantaShelake,Mirza Beg, Anil, Parsawale's literature.

B.A. III, 5S	Compulsory Marathi	➤ To understand humanity. ➤ To know the Power of Mind. ➤ To introduce the speciality of Mahatma Fule's literature. ➤ To know the importance of water. ➤ To know the importance of trees ,nature in our life. ➤ To understand the value of Urban aria. ➤ To understand the value of life. ➤ To know the speciality of poet and their poems like Tukaram ,Rramdas, Balkavi, Gres, wahruSonavane Sukhdev Dhanke literature.
B.A. III, 6S	Compulsory Marathi	➤ To understand the thought of Dr. PanjabraoDeshmikh, rajrshiShahuMaharaj,andRajmataJijau. ➤ To know the importance of food taste in our daily life and our happiness. ➤ To introduce the spectacles and its uses. ➤ To know the special character of Arani. ➤ To know factual picture of human life. ➤ To understand the comic events in the story. ➤ To know the speciality of poet and their poems like Sant ShekhMahamd, Father Stifan, Mardhekar, Narayan surve ,dahake, Kavathkar, and BabanSaradkar.
B.Com. I, 1S	Compulsory Marathi	➤ Knowledge about Baba Padmanji's literature. ➤ To understand Feminism . ➤ To understand Power of Young Generation. ➤ Knowledge about Poem . ➤ To understand social restrictions and social responsibility. ➤ To develop the selflessness. ➤ To understand the female awareness. ➤ To know about Hamid Dalwai, Baba Padmanji, Baba Amte, SumitraGokhale Literature.
B.Com. I, 2S	Compulsory Marathi	➤ Understand the works of Sant Kabir. ➤ Awareness about nature. ➤ Understand the importance of nature. ➤ To know about Democracy. ➤ Knowledge about Globalization and Its Effects ➤ To develop good Letter Writing ➤ To aware about War. ➤ To introduce poet and their works.
B.Com. II, 3S	Compulsory Marathi	➤ To know the literature of Dr. V. B. Kolte. ➤ To know the features of Dr. Panjabrao Deshmukh. ➤ To know the Place of Marathi language in Globalization. ➤ Understand the Literature ofPoet VindaKarndikar . ➤ To Know the importment of advertisement. ➤ Understand the literature of Sant Gadge Baba. ➤ Knowledge about Relation. ➤ To know the speciality of TukdojiMaharaj,StiveJobes, etc.

B.Com. II, 4S	Compulsory Marathi	➢ To inform about science and human life . ➢ To inform importance the protection of environment. ➢ Knowledge about happy life. ➢ To know the importance of advertisement. ➢ To inform about Mahanubhao samprday. ➢ To know about Lilacharitra. ➢ To introduceDrAmbedkar and Mahtma Gandhi. ➢ To know the speciality of gangadharPantavane Vishnu Solanke Narayan Surv's literature.
B.Com. III, 5S	Compulsory Marathi	➢ To understand the value of Water, Nature and Globalization. ➢ To understand ideology of ShahuMaharaj about Education. ➢ To know the speciality of Writers like V. D. Savarakar, Agarkarand MahtmaFule.
B.Com. III, 6S	Compulsory Marathi	➢ To understand the value of advertisement. ➢ To know the effects of dowry system. ➢ To know the effects of pollution. ➢ To introduce poet and their works.
B.Sc. I, 1S	Compulsory Marathi	➢ To understand the importance of science in our life. ➢ To know the importance of values in our life. ➢ To introduce poets & their works.
B.Sc. I, 2S	Compulsory Marathi	➢ To know the importance of values in our life. ➢ To introduce Writers and poets & their works. ➢ To Develop Scientific approach.
B.A. I, 1S	Marathi Literature	➢ To Create an interest in literature. ➢ To introduce Novel and Writer. ➢ To Understand Modern Poem. ➢ To understand the value of Water.
B.A. I, 2S	Marathi Literature	➢ To know the importance of values in our life. ➢ To introduce One act Play. ➢ Co3: To UnderstandModern Poem ➢ ToIncrease the critical attitude about literature studies.
B.A. II, 3S	Marathi Literature	➢ To know the importance of values in Marathi Story. ➢ To introduce Story Writers and his Story. ➢ To Develop Scientific approach to Literature.
B.A. II, 4S	Marathi Literature	➢ To know the importance of values in Athvaniche Pakshi. ➢ To introduce ancient Marathi literature. ➢ To introduce Lilacharitra and life of Shree Chakradharswami and Shree Govinprabhu. ➢ To Develop Sensibility. ➢ To introduce autobiography
B.A. III, 5S	Marathi Literature	➢ To introduce D. M. Mirasdarandhis literature. ➢ To Develop the language to Literature.
B.A. III, 6S	Marathi Literature	➢ To introduce Biography of Carver and his work. ➢ Increasing the critical attitude about literature studies

Hindi

B.Sc. I, 1S	Hindi	➢ To understand the yadnya in our life.

		➢ To know the importance of values in our life.
		➢ To know the importance of childhood, younghood & oldage.
		➢ To know the change in the nature of old people.
		➢ Understand the importance of Shivaji Maharaj's biography.
		➢ To know the corruption & its effects.
		➢ To introduce poets & their works.
B.Sc. I, 2S	Hindi	➢ To understand the works of Swami Dayanand.
		➢ Awareness about selfish people.
		➢ Understand the importance of relations.
		➢ To know about feminism.
		➢ Knowledge about love & affinity.
		➢ To develop good behaviour.
		➢ To aware feminism.
		➢ To introduce poets & their works.
B.A. I, 1S	Hindi	➢ Knowledge about friendship.
		➢ To know the effect of sound pollution.
		➢ Understand the features of Pramchand's literature.
		➢ To know the importance of shortcomings in life.
		➢ To introduce Mahabharat.
		➢ To understand the arts of borrowness.
		➢ To introduce poets & their works .
B.A. I, 2S	Hindi	➢ To inform literature of Vidyaniwas Mishra .
		➢ Understand the importance of Hindi language.
		➢ To know the loneliness people.
		➢ To know the importance of Animals & Birds.
		➢ Understand the honor of women.
		➢ To know the satirical literature of Harishankar Parsai.
		➢ To introduce poets & their works.
B.A. II, 3S	Hindi	➢ To Know the various difficulties of education.
		➢ To know the importance of villages self-dependancy.
		➢ To understand the shortcomings of intelligent people.
		➢ To understand the bullock cart fair.
		➢ Knowledge about rich and pours.
		➢ To know the life of Albert Einstein.
		➢ The speciality of poets like Sant Namdeo, Sant Rohidas, Ghananand, Muktibodh, Raghuvir Sahay, Niraj's literature.
B.A. II, 4S	Hindi	➢ To know the importance of life.
		➢ To know the Co-relation of culture and civilization.
		➢ To know about rural life .
		➢ To know the importance of environment.
		➢ To introduce the thoughts of Mahatma Basveshwar.
		➢ To understand the sensivity about urban life.
		➢ To know the speciality of the poet like Raskhan Adneya, Nagarjun, Dhumil, Subhadrakumari Chavhan, Chandrasen Virat's literature.
B.A. III, 5S	Hindi	➢ To understand human nature by discussion.

		➢ To know the effects of unemployment. ➢ To introduce the speciality of Premchand's literature. ➢ To know the characters of woman. ➢ To know the importance of nature in our life. ➢ To understand the value of animals. ➢ To understand the value of relatives like aunt. ➢ To know the speciality of poet and their poems like A. U. Harioundh, B. Varma, Nagarjun, Dushyant Kumar, R.K. Tarun, P. Shukla literature.
B.A. III, 6S	Hindi	➢ To understand the value of family and our strength. ➢ To know the importance of food taste in our daily life and our happiness. ➢ To introduce the spectacles and its uses. ➢ To know the special character of ideal grandmother. ➢ To know factual picture of human life. ➢ To understand the comic events in the story. ➢ To know the speciality of poet and their poems like Nirala, Adnyey, K. Agrawal, K. Narayan, S. Chouhan, J. Kureshi.
B.Com. I, 1S	Hindi	➢ Knowledge about Premchand's literature. ➢ To understand patriotism. ➢ To understand affinity about household appliance. ➢ Knowledge about Sagar Vishwavidyalaya. ➢ To understand social restrictions and social responsibility. ➢ To develop the selflessness. ➢ To understand the female awareness. ➢ To know about Saint Kabeer, Jagnnathdas Ratnakar, Jayshankar Prasad, Yatindra Mishra, Rajesh Mohata and Harish Arora.
B.Com. I, 2S	Hindi	➢ Understand the works of Swami Dayanand. ➢ Awareness about selfish people. ➢ Understand the importance of relations. ➢ To know about feminism. ➢ Knowledge about love and affinity. ➢ To develop good behavior. ➢ To aware about feminism. ➢ To introduce poet and their works.
B.Com. II, 3S	Hindi	➢ To know the literature of Pandit Neharu. ➢ To know the features of Ramdharisingh Dinkar. ➢ To know the Place of Hindi language in Globalization. ➢ Understand the Literature of Gopaldas Vyas . ➢ To Know the importment of advertisement. ➢ Understand the literature of Premchand. ➢ Knowledge about Ramdhanshinghs literature. ➢ To know the speciality of M.Gupt,Shivamangalsing Suman, Sumitranandan Pant, Kedarnath Agrawal, etc.
B.Com. II, 4S	Hindi	➢ To inform about science and religion.

		➤ To inform importance the protection of environment & women. ➤ Knowledge about happy life. ➤ To know the importance of translations. ➤ To inform spring season . ➤ To know about village life. ➤ To introduce speciality of Shivaji Maharaj. ➤ To know the speciality of Nagarjun, Hariwanshray Bacchan, Mahadevi Varma, Gopaldas, Niraj, Dharmaveer Bharti, Raghuveer Sahay's literature.
B.Com. III, 5S	Hindi	➤ To understand the different wild animals and birds. ➤ To understand the value of consumer in economy. ➤ To know the importance of tourism in human life. ➤ To understand idealogy of Swami Vivekanand . ➤ To understand the importance of studious nature for success ➤ To know the speciality of poets likeM. Chaturvedi, J.Prasad, Nirala, R.Dinkar, R. Varma, J. Vyas.
B.Com. III, 6S	Hindi	➤ To understand the value of advertisement. ➤ To understand the importance of hopefulness, loyalty, hardwork and forgiveness. ➤ To know the ideal character Bhaktin. ➤ To know the effects of dowry system. ➤ To know the woman character Bakul. ➤ To know the effects of pollution. ➤ To know the speciality of poets like R. Shingh, U. Bhatt, Nagarjun, H. Bacchan, G.M. Muktibodh and Dr. Ramprakash
Pali & Prakrit		
B.A. I, 1S	Pali & Prakrit	➤ Students will be motivated after learning Jatak Katha. ➤ Knowledge about the Philosophy of king Milinda and Monk Nagsena. ➤ Students can understand great Philosophical truths given by lord Buddha though this Gathas. ➤ Students know about the birth place of pali language and how to developed this language in Magadha. Students know about the pali Alphabets and tenses. ➤ Students know about the scriptyure of Dhammapada and Jataka.
B.A. I, 2S	Pali & Prakrit	➤ Students will motivate after learning Jatak Kattha ➤ Knowledge about the Trisharan, Panchasheel, and Mahamangalsutta to overall of developed of Students. ➤ Students will motivate after learning Tharigatha (Womens development in Buddhism). ➤ Student will motivate after learning Thargatha (Man

		development in Buddhism).
		➢ Student know about the great philosophy of four great truths & eight Nobel path.
		➢ To know about the scripture of Tharagatha, Tharegatha &Jataka tales
B.A. II, 3S	Pali & Prakrit	➢ Lord Buddha explain Vashistha and Bharadwaj caricature of true Brahmine, also know about king Makhadeo Scarification
		➢ To know about Sahashavaga and Thanavaga to develop students mind.
		➢ Students know about Patachara's life story. Rohini Thari explain Brahmine man cannot be sacred by doing bath in ganga river.
		➢ Lord Buddha explain about Matri to all human being. Students know about the reason of human defeated
		➢ Student know about the objective questions.
B.A. II, 4S	Pali & Prakrit	➢ Students will motivate after learning Jatak Katha.
		➢ Lord Buddha explain great philosophy in Dhammapada scripture.
		➢ Knowledge about devotion of monk Migjal and Sopak.
		➢ Students know about the knowledge of Danaparmita and Shilparmita
		➢ Student know about the objective questions.
B.A. III, 5S	Pali & Prakrit	➢ Students know about practical Knowledge of Meditation from "Mahasathipathansutta".
		➢ Students know the actual meaning of Danparmita & Shilparmita from Charyapitaka.
		➢ Students know about Pali Litterateur, Pandit Rahul Sanskrutayan, Anagrarik Dhammapal, & Aacharya Buddhaghosh.
		➢ Students know about objectives questions.
B.A. III, 6S	Pali & Prakrit	➢ Students will be motivated after learning Jatak Katha.
		➢ Students know about Assalayan Sutta and Jarasutta.
		➢ Students know the actual meaning of Shilparmita from Charyapitaka.
		➢ Students know about Pali Litterateur, Dr. Bhikhhu Jagdish Kashyap, Dr. Bhadant Ananad Koshalayan , & Dhammananad Kosambi.
		➢ Students know about objectives questions.

B.Com. I, 1S	Pali & Prakrit	➢ Students will motivate after learning Bakajataka and Shilvimansang Jatak .
		➢ Students know the first speech of lord Buddha in Varanasi also knowledge about Trisharan and Panchshil.
		➢ Students know about Yamakvagga and Appamadvagga.
		➢ Students know the life story of Amabapali Thari and Punica Thari.
		➢ Knowledge about Pali Alphabets and Three Tenses.
B.Com. I, 2S	Pali & Prakrit	➢ Students will be motivated after learning Gijajatak and Kalyan Jatak Stories.
		➢ Lord Buddha explain the philosophy of Priyajatak Sutta and Makhadeo Sutta.
		➢ Buddha explain how to control our gried.
		➢ Students know the life story Sunit Thara, Work is most important than cast.
		➢ Students know about pali grammer vowel & verb.
B.Com. II, 3S	Pali & Prakrit	➢ Students will be motivated after learning Jataka Stories .
		➢ Lord Buddha explain in Chattavagga our mind is like a monkey to going here and there. Students know about mind purification.
		➢ Knowledge about Tharigatha Scrapture.
		➢ Student take a knowledge about acient universities like Nalanda and Takshashila universities.
		➢ Students know about objectives questions.
B.Com. II, 4S	Pali & Prakrit	➢ Students know about Vaishali kingdom and lord Buddha's last visit in Vaishali. Knowledge about Jatak Katha's .
		➢ Students know about Danaparmita and Shilparmita.
		➢ Students take a knowledge of four great truths and eight Nobel path.
		➢ Students know how to pali easy.
		➢ Students know about objectives questions.
B.Com. III, 5S	Pali & Prakrit	➢ Students know about Buddha's last visit to Vaishali. And how Amrapali donted his "Aamravan" Garden to lord Buddha.
		➢ Students know about how to destroy our gried from poem Tanhavagga.
		➢ Students know about Danparmita.
		➢ Students know About Anopama Thari and Sujata Thari
		➢ Students take knowledge of Ajanta Caves, Vayrud Cave &

		Aurangabad Cave
B.Com. III, 6S	Pali & Prakrit	➢ Students know about King Milind & Monk Nagsen and its great knowledge.
		➢ Students Know about Angulimala Story.
		➢ Students take knowledge from Mahamangal Sutta.
		➢ Students will be motivated from story Matakbhatak Jatak.
		➢ Students know the story about Uluk Jatak. Who is the king of Bird?
		➢ Students practies how to write pali easy & general question.
		➢ Students know about objectives questions.

Sanskrit

B.A. I, 1S	Sanskrit	➢ Knowledge about the story from Hitopdesh.
		➢ Knowledge about the life changing event of king Ashok through Sanskrit drama.
		➢ Knowledge about the life and hard work of Kalpana Chawla.
		➢ Knowledge about comedy writing in Sanskrit.
		➢ Knowledge about Ramayana.
		➢ Knowledge about different types of Sanskrit verses.
		➢ Knowledge about tree plantation described in Bhavishya Puran.
		➢ Knowledge about the birth celebration event of Mahatma Gandhi described in poem Satyagraha.
B.A. I, 2S	Sanskrit	➢ Knowledge about classic drama writing in Sanskrit.
		➢ Knowledge about classic story writing in Sanskrit literature.
		➢ Knowledge about life and social service of Sant Gadge Baba.
		➢ Knowledge about Indian culture.
		➢ Knowledge about philosophical writing of Geeta.
		➢ Knowledge about ancient architect science.
		➢ Knowledge about translation of Dasbodh in Sanskrit about writing skills.
		➢ Knowledge about importance of hard work.
B.A. II, 3S	Sanskrit	➢ Knowledge about story of Panchtantra.
		➢ Students will be familiar with the writing skills of vishakhdatta.
		➢ Students will be familiar with the translation work of Dr. Mangla mirasdar.
		➢ Knowledge about the translation work of Dr. G.B.Palsule.
		➢ Knowledge about writing in Sanskrit Puranas.
		➢ Knowledge about teaching of vidula to his son about war through Mahabharat .
		➢ Students will be familiar with the work of Aabashahed Pallevar.
B.A. II, 4S	Sanskrit	➢ Students will be familiar with the knowledge of logic in

		Sanskrit.
		➢ Knowledge about Aeronautics described in Sanskrit literature.
		➢ Knowledge about the unity in diversity of India.
		➢ Knowledge about the duties of wife.
		➢ Knowledge about 14th chapter of Geeta.
		➢ Knowledge about the qualities and character of lord Ram.
		➢ Knowledge about the beauty of different Sanskrit verses.
B.A. III, 5S	Sanskrit	➢ Knowledge about the life and work of Gulabrao maharaj.
		➢ Knowledge about the use of Sanskrit in computer science.
		➢ Knowledge about the story of Shwetketu.
		➢ Students will be familiar with the humor used in Sanskrit drama.
		➢ Knowledge about the epic Kumarsambhavam.
		➢ Knowledge about the thoughts of Dr. Varnekar about status of women.
		➢ Knowledge about the vedic prayers.
		➢ Knowledge about the comedy poem written by Nilkantha Dixit.
B.A. III, 6S	Sanskrit	➢ Students will be familiar with the use of allegory in Sanskrit verses.
		➢ Knowledge about the Sanskrit verses related to health.
		➢ Students will be introduced to examples of nine Rasas of literature.
		➢ Knowledge about the story from Kathasaritsagar.
		➢ Knowledge about the Abhishek drama.
		➢ Knowledge about the life and work of Dr. APJ Abdul Kalam.
		➢ Knowledge about the authorities mentioned in Kautilya Arthashastra.
		➢ Knowledge about the description of seasons by Kalidas.
B.Com.I,1S	Sanskrit	➢ Knowledge about speech of vivekanand.
		➢ Knowledge about the story of Hitopdesh.
		➢ Knowledge about drama writing skills of Bhasa.
		➢ Knowledge about the Kadambari novel of Banbhatta .
		➢ Knowledge about the concept of karma explained in 3rd chapter of Geeta.
		➢ Knowledge about epic of Shri Harsha.
		➢ Knowledge about character of king Dilip described in Raghuvamsham.
		➢ Knowledge about the thoughts mentioned in different Sanskrit verses.
B.Com.I,2S	Sanskrit	➢ Knowledge about the story of Panchtantra.
		➢ Knowledge about the drama writing of Kalidas.
		➢ Knowledge about SWOT analysis.
		➢ Knowledge about the Vidyas mentioned in Kautilya Arthashastra.
		➢ Knowledge about modern Sanskrit poem writing.

		➤ Knowledge about Udyog parva of Mahabharat. ➤ Knowledge about description of raining. ➤ Knowledge about the health mentioned in different Sanskrit verses.
B.Com.II,3S	Sanskrit	➤ Knowledge about the Drama of Shudrak. ➤ Knowledge about the modern Sanskrit story writing. ➤ Knowledge about the life of Shankaracharya. ➤ Knowledge about the story of Manu and fish-God. ➤ Knowledge about the Sanskrit Verses. ➤ Knowledge about the transitory poetic work in Sanskrit. ➤ Knowledge about the modern Sanskrit poetry. ➤ Knowledge about the Ayodhya city from Ramayana.
B.Com.II,4S	Sanskrit	➤ Knowledge about the Sanskrit story writing. ➤ Knowledge about the drama of Bhavbhuti. ➤ Knowledge about the role of teacher in education system. ➤ Knowledge about the Sanskrit story writing. ➤ Knowledge about the glory of Sanskrit Language. ➤ Knowledge about the poetry of Shankaracharya. ➤ Knowledge about the Anyokti figure of speech in Sanskrit. ➤ Knowledge about the modern comedy Sanskrit poem writing.
B.Com.III,5S & 6S	Sanskrit	➤ Knowledge about the drama of Bhavbhuti and story of Lava and Kush. ➤ Knowledge about the selected verses from Nitishatak. ➤ Knowledge about how none and verbs are formed in Sanskrit language.
B.Sc. I, 1S	Sanskrit	➤ Introduction of Vedic literature with special reference to Upanishads. ➤ Introduction about Sanskrit story writing with special reference to Panchtantra. ➤ Introduction about ancient political science through Kautilya Arthashastra. ➤ Knowledge about Sanskrit drama writing. ➤ Knowledge about writing of great Sanskrit poet Kalidas with some verses of Raghuvamsham. ➤ Knowledge about modern Sanskrit poem writing and power of women. ➤ Knowledge about Lord Buddha's birth through epic of Ashwaghosha. ➤ Knowledge about Sanskrit verses.
B.Sc. I, 2S	Sanskrit	➤ Knowledge about ancient education system through the story of Satyakam Jabal. ➤ Knowledge about the life and work of Sanskrit writer Dr. Satyavrat shastri. ➤ Knowledge about ancient science of language and phonetic. ➤ Knowledge about classic prose writing. ➤ Knowledge about prayers in Vedic Suktas.

		➢ Knowledge about the construction of garden and water tank explained in Mahabharat.
		➢ Knowledge about health science mentioned in different Sanskrit verses.
		➢ Knowledge about Kumarsambhavam the epic of Kalidas.

Urdu

B.A. I, 1S	Urdu	By the end of the programme, the student will be able to ➢ Learn the art and style of writing essays. ➢ Read Urdu prose, to know famous Urdu writers and their famous works. ➢ Know famous Urdu ghazals, poets, their poetry and its special features. ➢ Acquaint with Urdu poems and the famous poets (Nazmnigars).
B.A. I, 2S	Urdu	By the end of the programme, the student will be able to ➢ Write the essays in Urdu. ➢ Know about Urdu drama,Dramatist and their contribution in Urdu Literature. ➢ Get opportunity to read and comprehend speciality of Urdu Gazals. ➢ Learn to read and write Urdu poems.(Nazm)
B.A. II, 3S	Urdu	By the end of the programme, the student will be able to ➢ Acquint with Urdu novelist, their life and their important works. ➢ Know about the major treads of Urdu Drama and 'fan' ➢ Read and learn about famous Urdu 'mazamin'. ➢ Read and understand the famous Urdu Patriotic poems.
B.A. II, 4S	Urdu	By the end of this course, the student will be able to ➢ Understand about Urdu literature, Its meanings and major Dialects. ➢ Learn about the contributions of Sufi Sant in the Expansion Of Urdu language. ➢ Understand 'What is Literature?' and the role of Literature in life. Appreciation of the 'Fanoone Latifa' ➢ Learn about the life and major contribution of the famous Urdu writer Sir Syyed Ahmed Khan in Urdu Literature.
B.A. III, 5S	Urdu	By the end of this course, the student will be able to ➢ Gain the art of writing essay in Urdu ➢ Gain insight about the personality of Hali through his Famous book 'Yaadgar e Galib'. ➢ Read and learn the famous Urdu 'Hammd and Nat'. ➢ Read about the famous Urdu poets and understand their poetry.
B.A. III, 6S	Urdu	By the end of this course, the student will be able to ➢ Write essay and construct the sentences. ➢ Gain insight about the personality of Saleha Abid Hussain

		through his famous book 'Yaadgar e Hali'. ➤ Read and write the Urdu ghazals. ➤ Learn about the new Urdu poets and their Poetry.
B.Com.	Urdu	By the end of this course, the student will be able to ➤ To know the importance of Hijaz Journey. ➤ To Study pitras Bukhari's work "Marhoom ki yad me" and its importance. ➤ To know Nazeer Akbar Abadi's massage of humanism from his poems. ➤ To understand and practices skill of expression. ➤ To know impact of tread on society.
B.Sc.	Urdu	By the end of this course, the student will be able to ➤ To give information about Urdu language and culture. ➤ To provide information of world culture. ➤ To make student understand importance of computer technology. ➤ To know the contribution of Urdu literature in National Integration. ➤ To Know the existence of human life and environment in truest sense.

Sociology

B.A. I, 1S	Sociology	➤ To know about introduction of sociology. ➤ To understand the sociological perspective ➤ To know about basic concept of sociology ➤ To understand status and role ➤ To know about social control.
B.A. I, 2S	Sociology	➤ To understand individual and society. ➤ To know about Social institution ➤ To understand religion ➤ To know about social movement ➤ To know about social stratification and social change.
B.A. II, 3S	Sociology	➤ To Understand social problem in India. ➤ To know about familiar problems . ➤ To understand population problems in India. ➤ To know about rural contemporary in India. ➤ To know about Problem of alcoholism.
B.A. II, 4S	Sociology	➤ To know about Current social problem in India. ➤ To understand problem of terrorism and white collar crime. ➤ To understand Problem of weaker section in India. ➤ To understand Problems relating to urbanization. ➤ To know about Intolerance riot crime.
B.A. III, 5S	Sociology	➤ To understand the social anthropology. ➤ To know about Methods of social anthropology. ➤ To know about tribal Society in India . ➤ To understand tribal religion. ➤ To know about tribal Economy.

B.A. III, 6S	Sociology	➢ To understand the Tribal Social Life. ➢ To know about Family. ➢ To know about Totemism . ➢ To understand Tribal Problems. ➢ To know about tribal Development.

Political Science

B.A. I, 1S	Indian Constitutional Provisions and Local Self Government	➢ Understand salient features of the Indian Constitution, Preamble & Fundamental Rights ➢ Understand Directive Principals of State Policy, Fundamental duties & Methads of acquire citizenship. ➢ Understand President, Vice President, and Prime Minister of Indias appointment process & power , Function. ➢ Understand Indian Parliament. ➢ Understand Indian Judiciary
B.A. I, 2S	Indian Constitutional Provisions and Local Self Government	➢ Understand Election commission of India. ➢ Understand State executive. ➢ Understand state legislature of Maharashtra. ➢ Understand Local Self Government On Maharashtra. ➢ Understand women's participation in Panchayati Raj of Maharashtra.
B.A. II, 3S	Selected Constitution and International Relations (U.K. , U.S.A. & China)	➢ Understand salient features of the constitution of UK., Historical background of crown ,and executive council. ➢ Understand parliamentary system of UK. ➢ Understand salient features of USA and executive council . ➢ Understand legislature of USA Congress . ➢ Understand organization of SAARK.
B.A. II, 4S	Selected Constitution and International Relations (Switzerland & China)	➢ Understand salient features of constitution of China and National People Congress. ➢ Understand executive council of China. ➢ Understand United nation Organization. ➢ Understand Security Council , Secretary General and International court.
B.A. III, 5S	Modern Concepts and Policy in Politics	➢ Understand Concept of Leadership. ➢ Understand Reservation Policy In Indea. ➢ Understand Concept of Nationalism. ➢ Understand Concept of Communalism. ➢ Understand Modern concept of Terrorism.
B.A. III, 6S	Concepts of Western and Indian Thinkers	➢ Understand concept of state by Aristotle & M. K. Gandhi. ➢ Understand concept of Democracy. ➢ Understand concept of Nationalism. ➢ Understand Modern concept of socialism. ➢ Understand concept of Behaviorism and Sovereignty.

History

B.A. I, 1S	History Of India From Earliest Times 1205 A.D.	After completing the course contents students are able to... ➢ Understand the difference between Primary and secondary sources and use the sources in writing history. ➢ Understand the history of Indus valley civilization. ➢ Understand the religious movement and difference between the philosophy of Hinduism, Jainism and Buddhism. ➢ Students get information about administration system in ancient India. ➢ Perceive socio-economic, religious situation under the Maurya. ➢ Clarify the concept of golden age of Gupta period. ➢ Understand the condition of religion of Bouddha in ancient India.
B.A. I, 2S	History of India From 1206 A.D. to 1525 A.D.	After completing the course contents students are able to... ➢ Understand the Establishment of Muslim power in India. ➢ Recognize the Socio, Political, Economic, Religious conditions under Vijaynagar and Bahamani empire. ➢ Know the system of trade, commerce and technological development during the sultanate period. ➢ Understand the nature of village community & relationship between the Muslim and Hindu society. ➢ Understand the literature, education and art-architecture condition in sultanate. ➢ Understand the political, military Structure, condition of society and Social Status of women in sultanate Period.
B.A. II, 3S	History of India From 1526 A.D. to 1756 A.D.	After completing the course contents students are able to... ➢ Understand the establishment, expansion, consolidation and decline of Mughal power. ➢ Identify the socio, economic, religious and political condition in Mugal period. ➢ Understand the society and status of women in Mugal period. ➢ Understand the religious movements in Mugal period. ➢ Understand the importance of the Hindavi Swarajya in History. ➢ Understand the formation of welfare state during the Maratha Rule. ➢ Understand the Policy of Shivaji about agricultural and farmers. ➢ Identify the contribution of Chhatrapati Sambhaji, Chhatrapati Rajaram and Maharani Tarabai in Maratha freedom movement against Mugal.
B.A. II, 4S	History of India From 1757 A.D. to 1947 A.D.	After completing the course contents students are able to... ➢ Identify the economic changes in India by British power. ➢ Evaluate the renaissance and social reform movement in India. ➢ Distinguish the detail account of British raj as well as its

Class	Course	Course Outcome
		overall impacts on the Indian society, economy, agriculture and technology. ➤ Identify the importance of modern education in rise the nationalism in India. ➤ Inculcates the nationalist feelings among the students. ➤ Identify the important persons, their ideas, teachings and its effects in Modern India. ➤ Acquainted the knowledge of national leaders to create a memory of the national heroes. ➤ Understand the difference between moderates, extremists and revolutionaries. ➤ Understand the evolutionary processes of constitutional developments.
B.A. III, 5S	History of Modern Europe: (From 1780 A.D. to 1965 A.D.)	After completing the course contents students are able to… ➤ Get information about the French revolution. ➤ Understand the rise, work and downfall of Napoleon Bonaparte. ➤ Understand the unification of Italy and Germany. ➤ Understand the Bismarck's role in Germany under his leadership. ➤ Understand the Kaiser William II role in First World War. ➤ Understand the Russia revolution and its effect.
B.A. III, 6S	History of Modern World (From 1921 to 1965 AD)	After completing the course contents students are able to… ➤ Examine the Nazism and Fascism in Germany and Italy. ➤ Got knowledge regarding Russia under Stalin. ➤ Illustrate the participation of USA in the World War. ➤ Understand the causes and results of Second World War and the establishment of UNO. ➤ Understand the effect of military alliances of Russia and America. ➤ Understand the cold war and its consequences, problem of the world countries, foundation and role of UNO. ➤ Understand the causes and effect of Non-Aligned movement on the world.

Course Outcomes (CO's) of Commerce Stream

Class	Course	Course Outcome (Student will able to……….)
B.Com. I, 1S	Principle of Business Organization	➤ To know about commerce & Industry ➤ To understand the basic concept of Business organization, E-Commerce and online Trade, toilers, cashless transaction. ➤ To know about merger and acquisition ➤ To understand New Enterprises

		➢ To know about trade in India.
	Computer Fundamentals & Operating System I	➢ To know about fundamentals of computer. ➢ To understand computer organization. ➢ To knowledge about memory organization of computer. ➢ To understand Input/output Devices or computer system ➢ Practical knowledge about MS word 2007.
	Principle Of Economics	➢ Aware about fundamental concept of economics ➢ Able to understand consumer behavior. ➢ Realize the importance of demand and demand elasticity. ➢ Understand production function and various production theories. ➢ Understand concept of production cost and revenue
	Advanced Accountancy	➢ Understanding the concepts of financial accounting, Exposure to nature and advantages of accounting, Accounting concepts and conventions, Introduction to Accounting Standards in India. ➢ To Understanding the subsidiary Books, Purchases Book, Purchases return Books, Sales Books, Sales return Books, Simple Cash Books, Double Column Cash Book, Triples & Petty cash Books. ➢ Obtaining the knowledge of individual final accounts. ➢ Getting knowledge of depreciation method. ➢ Obtaining the knowledge of Bank Reconciliation Statements.
B.Com. I, 2S	Principle Of Business Management	➢ To understand Management Concept. ➢ To know about planning ➢ To understand organization concept ➢ To know about directing ➢ To know about Controlling
	Computer Fundamentals & Operating System II	➢ Acquire knowledge about operating system. ➢ To know about installing and uninstalling various programme & features. ➢ To understand modern communications concepts. ➢ To know about word processing working with table & Graphics ➢ Practical knowledge about Power point Presentation.
	Business Economics	➢ Understand concept of Business economics and managerial economics ➢ Understand different market structure in market system ➢ Understand price determination different market ➢ Understand factors of pricing wages and rent ➢ Understand factors of pricing interest and profit
	Financial Accounting	➢ To know accounts of Non Trading Institutions. ➢ Understanding the special accounting areas : Accounts of Co-operative Societies. ➢ Understanding Accounting for Agriculture farm. ➢ Knowledge about Hire Purchases & Installment Purchase

		Accounts
		➢ To know about Insolvency Accounts.
B.Com. II, 3S	Business Mathematics	➢ To Understand Natural Numbers, integers, HCF & LCM, Linear equation. ➢ To know about percentage. ➢ To understand Average & Profit & Loss. ➢ To know about Mathematics of finance. ➢ To know about Ratio & Proportion.
	Monetary System	➢ To understand money concept, kinds of money. ➢ To know about value of money. ➢ To understand price fluctuations.. ➢ Acquire knowledge about money market. ➢ To understand capital market.
	Auditing	➢ Acquire knowledge concept of Auditing ➢ Understand of Internal Check system. ➢ Role of Company Auditor. ➢ Audit of Dividend and report ➢ Audit of Banking Insurance and educational institutions
	Company Accounts	➢ To know about shares and accounting entries regarding issue of shares. ➢ To know the final company accounts. ➢ To knowledge about profit prior to incorporations. ➢ To know about companies amalgamations. ➢ To know about absorption of company.
	Information Technology &Business Data processing-I	➢ To Understand the basic concept of data and data processing. ➢ To know about advantages and disadvantages of data base. ➢ To understand the database management system. ➢ To understand about Microsoft Excel & Spreadsheet package. ➢ Practical knowledge of formula, functions and chart in Excel.
B.Com. II, 4S	Business Statistics	➢ To know about introduction of Statistics. ➢ To understand Index Numbers. ➢ To understand Concept of Central Tendency & their Measures. ➢ To understand Concept of Dispersion. ➢ To know about Co-efficient of correlation.
	Indian Financial System	➢ To understand Indian Financial market. ➢ To know about Indian Banks. ➢ To know about commercial Banks. ➢ To understand Reserve Bank of India. ➢ To know about stock exchange.
	Income Tax	➢ Acquire knowledge concept of Income tax ➢ Computation of Income from salary and house property. ➢ Income from other sources and deductions. ➢ Concept of income tax authorities ➢ E-filling procedure
	Corporate Accounting	➢ To know about final accounts of Banking Company. ➢ To know about final accounts of fire and accident insurance

		company.
		➢ To knowledge about the liquidation of company.
		➢ To know about valuation of Goodwill.
		➢ Analyze the Share Valuation.
	Information Technology &Business Data processing-II	➢ To understand the basic concept of information technology.
		➢ Acquire knowledge about computerize accounting and taxation.
		➢ To know about the Accounting Software Tally 9.0
		➢ To know about ledgers, vouchers and entries for Tally 9.0
		➢ Practical knowledge about reports and advanced features in Tally.
B.Com. III, 5S	Cost Accounting	➢ To understand meaning, nature an scope of cost accounting.
		➢ To know about accounting overheads.
		➢ To know about Labour Cost
		➢ To understand reconciliation Statement
		➢ To understand Process Costing
	Business Environment	➢ To understand Indian Business Environment.
		➢ To know about Indian Agricultural Environment.
		➢ To know about Indian Industrial Environment
		➢ To understand Indian Service Environment
		➢ To understand India and Foreign Trade Environment
	Business Regulatory Frame Work	➢ To understand Indian Contract act. 1872.
		➢ To know about Special Contacts
		➢ To know about Sales of Goods Act. 1930 and Consumer Protection Act, 1986
		➢ To understand Negotiable Instrument Act, 1881
		➢ To understand Goods and Services Tax Act, 2017
	Internet and world Wide Web I	➢ To understand Network &Types of Network.
		➢ To know about Internet, mechanism of the internet
		➢ To know about Electronic Mail, Gmail, Password, Captcha.
		➢ To understand Architecture of World wide web
		➢ To understand Designing Website HTML, Structure of the home page
	e-Commerce- I	➢ To understand Basics of e-Commerce.
		➢ To know about e-Commerce in India
		➢ To know about Retail e-Commerce
		➢ To understand B2B E-e-Commerce
		➢ To understand E-payment and E-Banking
B.Com. III, 6S	Management Accounting	➢ To understand meaning, nature an scope of Management accounting.
		➢ To know about Break-Even Analysis.
		➢ To know about Ratio Analysis
		➢ To understand Budget & Budgetary Control
	Economics of Development	➢ To understand Indian Economic Development.
		➢ To know about Economic Growth Models.
		➢ To know about Growth: Balanced & Unbalanced

		➤ To understand Development of Capital : Human & Financial
	Company Law	➤ To understand Company act, 2013.
		➤ To know about Incorporation of Company
		➤ To know about Share Capital of Company
		➤ To understand Securities Market
		➤ To understand Company Secretary and CompanyMeetings.
	Internet and world Wide Web II	➤ To understand Web Bwowsing.
		➤ To know about Web Directory, Search Engines, Feature of Google
		➤ To know about Social Networking Websites, Mobile Application.
		➤ To understand Google Drive, Google Forms, Google Classroom
		➤ To understand Using Ms Front page to create webpage
	e-Commerce- II	➤ To understand Internet e-commerce.
		➤ To know about B2C Internet Marketing
		➤ To know about B2B Online Marketing
		➤ To understand E-governance
		➤ To understand E-Governance Models

Course Outcomes (CO's) of Science Stream

Chemistry

Class	Course	Course Outcome (Student will able to..........)
B.Sc. I, 1S	Chemistry	➤ Knowledge of Periodic Properties and Ionic bonding CO2: Information of S and P block elements
		➤ Knowledge of Reactive intermediates, electronic displacements and Aliphatic hydrocarbons
		➤ Knowledge of Nomenclature, aromaticity, orientation and Substitution of aromatic compounds
		➤ Information of thermodynamics
		➤ Knowledge of Gaseous state and Phase rule
		➤ P1: Semi micro qualitative analysis of inorganic salt mixture containing two acidic radicals and two basic radicals of same or different groups.
		➤ P2: Preparation of Organic Compounds
B.Sc. I, 2S	Chemistry	➤ Information of covalent bonding, Polarization and covalent bonding
		➤ Knowledge of Non aqueous solvents and Noble gases.
		➤ Understand synthesis and reactions of Alkyl/aryl halides, Alcohols.
		➤ Understand synthesis and reactions of Phenols, ethers and Epoxides.
		➤ Information of Electrical and magnetic properties.

		➢ Knowledge of Chemical Kinetics.
		➢ P1: Complete analysis of simple organic compounds. ➢ P2: Physical Chemistry Experiments like determination of Surface Tension, coefficient of viscosity, Parachor value, cleaning power of detergent, activation energy and heat of solution.
B.Sc. II, 3S	Chemistry	➢ Knowledge of Covalent, metallic bonding and VSEPR theory ➢ Study of Volumetric and Gravimetric Analysis. ➢ Synthesis and Reactions of Aldehydes, Ketones and Carboxylic acids ➢ Knowledge of Optical, Conformational and Geometrical isomerism ➢ Information of thermodynamic equilibrium and Phase equilibrium ➢ Knowledge of Liquid state and electrochemistry.
		➢ P1: Volumetric analysis and gravimetric analysis ➢ P2: To study the kinetics and determination of physical properties like Partition coefficient, transition temperature, refractive index, solubility etc.
B.Sc. II, 4S	Chemistry	➢ Study of transition series elements and Extraction of elements. ➢ Knowledge of Inner transition elements and Principles of Metallurgy ➢ Understand synthesis and reactions of Polynuclear hydrocarbons, Reactive Methylene compounds and Carbohydrates ➢ Understand Aromatic nitro compounds, Amino Compounds, Diazonium Salts, Amino acids and Proteins. ➢ Information of Colligative Properties of dilute solutions. ➢ Knowledge of crystalline state.
		➢ P1: Inorganic Estimations like Colorimetric, hardness, Complexometry ➢ P2: Organic Estimations like casein, Caffeine, Glucose, Acetamide.
B.Sc. III, 5S	Chemistry	➢ Knowledge of Coordination compounds and chelates ➢ Study of Crystal Field Theory and electronic spectra. ➢ Synthesis and Reactions of Heterocyclic compounds and Organometallic compounds ➢ Knowledge about Chemistry of Some dyes, drugs and Pesticides. ➢ Information of Photochemistry ➢ Knowledge of Molecular Spectroscopy
		➢ P1: To Prepare some Inorganic Complexes ➢ P2: To study Conductometric, Potentiometric and

		Polarometric Experiments.	
B.Sc. III, 6S	Chemistry	➢ Study of Analytical chemistry and kinetic aspect of Metal Complexes ➢ Knowledge of Organometallic Chemistry, inorganic Polymers and Bio-inorganic Chemistry ➢ Understand Electronic and Infrared Spectroscopy. ➢ Understand NMR and Mass spectroscopy ➢ Information of Elementary Quantum Mechanics ➢ Knowledge of Electrochemistry and Nuclear Chemistry.	
		➢ P1: Organic Estimations like Urea, Glycine, formaldehyde etc. ➢ P2: To study Conductometric, Potentiometric and Polarometric Experiments.	

Botany

B.Sc. I, 1S	Botany	➢ Knowledge of diversity of plant includes all microorganisms. ➢ Knowledge of classification, diversity and importance of algae. ➢ Knowledge of classification, diversity and importance of fungi. ➢ Knowledge of classification, diversity and importance of Bryophytes. ➢ Knowledge of classification and diversity of Pteridophytes. ➢ Knowledge of Application of Microbes Cryptogams	
		➢ P1: Study of preparation of temporary mount, identification and classification of algae, bryophyte, and pteridophytes materials. ➢ P2: study of permanent slides of various materials plant pathology with the help of field study and excursion tour.	
B.Sc. I, 2S	Botany	➢ Information of fossils study using geological time scale. ➢ Knowledge of classification, general studies and economic importance of gymnosperm plants. ➢ Studied the diversity on the basis of morphology of flowering plants. ➢ Studied the morphology of flower and inflorescence. ➢ Information of fruit morphology and utilization of plants. ➢ Knowledge of Medicinal plants and others economically important plants.	
		➢ P1: Morphology, anatomy, double stains permanent mount preparation of gymnosperm plants and fossils study.	

		➤ P2: Detailed morphological study of root, stem, leaf flower its modification of various plants and utilization of plants study.
B.Sc. II, 3S	Botany	➤ Knowledge of nomenclature, herbarium and biodiversity concept. ➤ Study of Classification and systematic of angiosperm. ➤ Knowledge of systematic studies and economic importance of angiospermic families. ➤ Knowledge of anatomical studies of various angiosperm plants. ➤ Information of anatomical behaviour in plants. ➤ Knowledge of embryology.
		➤ P1: study of embryology, pollination, and mounting of parts of flower in angiospermic plants. ➤ P2: To study the anatomy and taxonomy of angiosperm plant with the help of laboratory study, field study by conducting excursion tour.
B.Sc. II, 4S	Botany	➤ Study of cell biology. ➤ Knowledge of structure and function of various cell organelles. ➤ Genetics study related to chromosome. ➤ Understand the Mendelian genetics and problem related to genetics. ➤ Study of linkage, crossing over and mutation in gene of genetics. ➤ Biochemical study of various molecules like enzyme, protein, lipid, DNA, RNA etc.
		➤ P1: Study the isolation of cell organelles using various techniques and study the stages of mitosis and meiosis. ➤ P2: study of genetics using monohybrid and Dihybrid ratio with its related problems and demonstrate various test for biochemical's compound.
B.Sc. III, 5S	Botany	➤ Knowledge of plants and its relation with water. ➤ Study of hoe glucose is form and its utilization in plant. ➤ Ideas about role of nitrogen, its fixation and growth hormone. ➤ Knowledge about various plant response with respect to various factor. ➤ study of ecology, environments and factors. ➤ Knowledge of population, succession in various Ecosystems.
		➤ P1: Studied major and minor experiments of plant physiology.

		➢ P2: Studied major and minor experiments of ecology and environment.
B.Sc. III, 6S	Botany	➢ Study of DNA as genetic material. ➢ Study of gene structure and how it has been express in cell system. ➢ Understand how to regulate gene expression in cell system. ➢ Understand that by using various technical tools how to manipulate gene, or genetic engineering. ➢ Information of plant tissue culture. ➢ Gives idea about how the biotechnology is applicable in agriculture, industry and health care.
		➢ P1: studied various major and minor experiments on molecular biology. ➢ P2: studied working principle and application of various biotechnological instruments and techniques.
Zoology		
B.Sc. I, 1S	Zoology	➢ Knowledge of classification and general characters of non-chordates ➢ Knowledge of parasites and human diseases. ➢ Knowledge of morphological and anatomical structure of nonchordates. ➢ Knowledge of reproductive system, digestive system, respiratory system and excretory system in nonchordates. ➢ To understand the parasitic adaptation in helminth parasites. ➢ study of larval form and lifecycles.
		➢ P1: Study of Life and diversity of non-chordata, Permanent slides, Anatomical Study through Computer Aided Techniques, Video Clipping Models, Photographs and other available resources.
B.Sc. I, 2S	Zoology	➢ Knowledge of cell structure and different cell organelles and their function. ➢ Knowledge of different cell organelles. ➢ Knowledge of nucleus, chromosomes and their function. ➢ Knowledge of cell division, gametogenesis and ➢ fertilization. ➢ Embryological study of Amphioxus, frog and chick. ➢ Information about placentation, parthenogenesis, regeneration and stem cell.
		➢ P1: Staining of Cell organelles, Study of life cycle and chick embryological study.
B.Sc. II, 3S	Zoology	➢ Gain knowledge of Phylum Chordata, Protochordata with special affinities of Agnatha. ➢ Study of class Amphibia and Reptilia with type study of

			Rana tigerina and *Calotes versicolor*. ➢ Study of class Aves and Mammals with type study of *Columba livia*. ➢ Knowledge of Evolution with direct and indirect evidence study. ➢ Information of Evolutionary process and Hardy – Weinberg equilibrium for population genetics. ➢ Knowledge of Adaptive radiations in mammals which include man. Special adaptation in desert, Aquatic and terrestrial animals.
			➢ P1: Taxonomy of Chordata, Osteology of Rabbit, Evolution study from specimen and histological slide study of amphioxus, frog and rat.
B.Sc. II, 4S	Zoology		➢ Study of Genetics law and Gene Interaction. ➢ Knowledge of Linkage, Crossing over and multiple alleles. ➢ Understand sex determination theory with genetic disorders and also biochemical genetic disorders. ➢ Understand Genetic Screening, parental diagnosis and birth control measures. ➢ Understand abiotic and biotic factors with special references with types of species interaction.. ➢ Knowledge of ecosystem concept and various ecosystems (Terrestrial, Aquatic).
			➢ P1: Genetic experiments, Genetics Diseases, Ecology Survey and quantitative analysis.
B.Sc. III, 5S	Zoology		➢ Knowledge of Respiration and Circulatory System ➢ Study of Muscle physiology. ➢ Information about Nerve physiology and chemical Co-ordination. ➢ Knowledge about Reproductive physiology along with Homeostasis and conservative regulation. ➢ Information of Agricultural Zoology (Beneficial Insects and Harmful Pest) ➢ Knowledge of Aquaculture (Fish product and byproduct).
			➢ P1: They know Hematological, Biochemical experimentation, life cycle of various insect, Histological Slides of major organs along with Study of locally available fishes.
B.Sc. III, 6S	Zoology		➢ Study of Genetic material, Experimentation, Various types. ➢ Obtain Knowledge of Genome replication and diseases related with it. ➢ Understand basic knowledge of Genetic code, transcription and translation in Eukaryotic and

		prokaryotic cell.
		➢ Gain knowledge of mutation and types of mutation..
		➢ Understand Biotechnological techniques.
		➢ Knowledge of Immune system and immune system work.
		➢ P1: Microtechnique for permanent slide preparation and preparation of various chemicals.

Mathematics

B.Sc. I, 1S	Algebra, Trigonometry, Differential and Integral Calculus	➢ Study of Complex number and trigonometric series. ➢ To gain the knowledge of Elements of quaternion and Theory of equations ➢ Study the system of equations by using matrix methods. ➢ Knowledge of limit of a function and differentiability. ➢ To Understand Rolle's theorem ➢ Knowledge of Partial derivatives and reduction formulae
B.Sc. I, 2S	Differential Equations (Ordinary and Partial), Vector Analysis and Solid Geometry	➢ Study of ordinary differential equation & Second order linear differential equations. ➢ Knowledge of Reduction of order, Formation of partial differential equations. ➢ To gain the knowledge of Compatible differential equations. ➢ Study of Scalar and vectors, Frenet - Serret formulae. ➢ To gain the knowledge of Greens theorem, divergence and Curl. ➢ To acquire the Knowledge of Sphere and Cone.
B.Sc. II, 3S	Advanced Calculus and Elementary Number Theory	➢ Knowledge of Sequence and Series ➢ Study of Limit & continuity & Maxima & minima of functions of two variables. ➢ Understand Double integral, Gauss and Stoke's theorem. ➢ Knowledge of Divisibility, Prime numbers and Fermat numbers. ➢ Study of Congruence and Arithmetic functions. ➢ Knowledge of Primitive roots, quadratic residues.
B.Sc. II, 4S	Modern Algebra: groups and rings and Classical Mechanics	➢ Study of Group, Cosets and normal subgroups. ➢ To acquire the knowledge of Homomorphism and isomorphism. ➢ Knowledge of Ring, integral domain and field, and Ideal. ➢ To analyze D'Alembert's principle, Central force motion. ➢ Study of Calculus of variation. ➢ Knowledge of Hamilton's principle and Rigid body.
B.Sc. III, 5S	Mathematical	➢ Knowledge of Riemann Integral, Improper integrals and

	Analysis and Mathematical Methods	their Convergence. ➢ Study of Continuity and differentiability of complex function. ➢ Study of Elementary function and Metric spaces. ➢ Knowledge Legendre's equation and Bessel's equation. ➢ To gain the knowledge of Fourier series. ➢ To acquire the Knowledge of Laplace transform and Fourier Transform.
B.Sc. III, 6S	Linear Algebra and Special Theory of Relativity	➢ Study of Vector Space and Linear transformations. ➢ Knowledge of Dual Spaces and Inner Product Spaces. ➢ Acquire the knowledge of Modules. ➢ Understand Review of Newtonian Mechanics and Relativistic Kinematics. ➢ Study of Geometrical representation of space- time and Relativistic Mechanics. ➢ Knowledge of Electromagnetism and Maxwell's equation in tensor form.

Physics

B.Sc. I, 1S	Physics	By the end of this Course students should be able to know about: ➢ Mechanics ➢ Properties of matter ➢ Waves and Oscillations. ➢ Keplers law of Planetary Motions. ➢ Motions related to rigid body. ➢ Elasticity. ➢ Simple Harmonic Motions. ➢ Kinematics of Moving Fluids
		By the end of this Course students should be able to know about the Following practicalknowledge: ➢ Study of laws of Parallel and perpendiculars axes for moment of inertia. ➢ Determination of coefficient of restitution for inelastic collision. ➢ Moment of inertia of fly wheel. ➢ Study of compound pendulum. ➢ To determine moment of inertia of a body using bifilar suspension. ➢ Modulus of rigidity by Torsional Pendulum. ➢ Acceleration due to gravity by Kater's pendulum. ➢ Study of Oscillations of mass under different combinations of springs. ➢ Young's modulus by cantilever. ➢ Young's Modulus by bending of beam. ➢ Modulus of rigidity by statical method. ➢ Young's modulus by Vibration Method. ➢ Modulus of rigidity by Maxwell's needle.

		➢ Coefficient of Viscosity by Poiseulle"s method. ➢ Surface tension by Quincke"s method. ➢ Determination of Surface tension by Jager"s method.
B.Sc. I, 2S	Physics	By the end of this Course students should be able to know about: ➢ Kinetic Theory ➢ Thermodynamics ➢ Electric Current ➢ Ideal Gas and Various phenomenon of gases. ➢ Motion of charged partical in electric and magnetic field. ➢ Various theorms related to electric field ➢ Alternating current
		By the end of this Course students should be able to know about the Following practical knowledge: ➢ Heating efficiency of electrical Kettle with varying voltages. ➢ Determination of "J" by Callendar and Barne"s method. ➢ Cp/Cv by Clement and Desorme"s method. ➢ Thermal conductivity of an insulator by Lee"s disc method. ➢ Determination of charge sensitivity of ballistic galvanometer. ➢ Measurement of low resistance by Carey-foster Bridge. ➢ Measurement of low resistance by potentiometer. ➢ Measurement of inductance by phasor diagram method. ➢ Measurement of capacitance by phasor diagram method. ➢ Study of frequency resonance of series LCR circuit and determination of Q-factor. ➢ To study behavior of R-C.circuit as a filter. ➢ To determine high resistance by leakage method. ➢ C1 / C2 by De-Sauty's method. ➢ Verification of laws of capacitances. ➢ Study of transformer. ➢ Verification of Kirchoff's law, using electrical network. ➢ Verification of Maximum power transfer theorem. ➢ Verification of Thevenin's theorem. ➢ Verification of Norton's theorem. ➢ Verification of Milliman"s theorem.
B.Sc. II, 3S	Physics	By the end of this Course students should be able to know about: ➢ Mathematical background and Elecrostatics ➢ Magnetostatics and Maxwell"s Equations ➢ Solid State Electronics Devices-I ➢ Solid State Electronics Devices-II ➢ Special Theory of Relativity ➢ Atmosphere and Geophysicss
		By the end of this Course students should be able to know about the Following practical knowledge: ➢ To determine characteristics of CB transistor ➢ To determine characteristics of CE transistor ➢ Measurement of magnetic field by Hall probe method

		➤ To study variation of gain of CE amplifier with load ➤ To study Zener regulated power supply ➤ To determine characteristics of FET ➤ To study FET as a voltmeter ➤ To study Weins bridge oscillator ➤ To study phase shift oscillator ➤ To study Wein"s bridge oscillator ➤ To study p-n diode as a rectifier ➤ To determine characteristics of p-n junction. ➤ Study of OP AMP as an inverting amplifier ➤ Study of OP AMP as noninverting amplifier ➤ Study of OP AMP as an adder ➤ Study of OP AMP as subtractor ➤ Study of OP AMP as differentiator ➤ Study of OP AMP as an integrator ➤ To determine characteristics of Phototransistor ➤ Measurement of field strength its variation in a solenoid.
B.Sc. II, 4S	Physics	By the end of this Course students should be able to know about: ➤ Geometrical optics and interference ➤ Diffraction ➤ Laser. ➤ Fiber Optics ➤ Renevable Energy Resources
		By the end of this Course students should be able to know about the Following practical knowledge: ➤ To determine the wavelength of monochromatic light by Newton"s rings. ➤ To verify the Brewster"s law. ➤ To determine the refractive indices for ordinary and extra-ordinary rays using double image prism ➤ To determine the Concentration of sugar solution by half shade polarimeter. ➤ To determine the wavelength of monochromatic light by plane diffraction grating. ➤ To find the number of lines per centimeter of the given grating. ➤ To determine the resolving power of plane diffraction grating. ➤ To determine the resolving power of telescope. ➤ To determine the wavelength of laser light. ➤ Determination of refractive index of a prism by spectrometer. ➤ Determination of dispersive power of prism material ➤ To determine the resolving power of prism. ➤ study of interference of light by bi-prism experiment and find the wavelength of sodium light. ➤ To verify the law of Malus of plane polarized light. ➤ Polarplots of solarpanel ➤ Measurement of direct radiation using Pyrheliometer .

		➤ Measurement of global & diffuse radiation using pyranometer ➤ Determination of solar constant ➤ To determine frequency and phase of signal using CRO. ➤ To determine capacitance by Scherring bridge method. ➤ To determine self inductance by bridge rectifier method. ➤ To determine frequency of AC mains by Sonometer. ➤ To study and plot I-V characteristics of solar cell. ➤ To study time constant of an RC circuit experimentally and verify the result theoretically. ➤ Verification of Stefan's law of radiation by using an incandescent lamp as black body Radiator. ➤ To study (a) Half-wave Rectifier and (b) Full-wave Bridge Rectifier and investigate the effect of C, L and p filters.
B.Sc. III, 5S	Physics	By the end of this Course students should be able to know about: ➤ Origin of Quantum Mechanics. ➤ The Schrodinger equation and its applications. ➤ Atomic and Molecular Spectrocopy ➤ Nuclear Physics. ➤ Hybrid Parameter ➤ Feedback Amplifier
		By the end of this Course students should be able to know about the Following practical knowledge: ➤ To study RC coupled amplifier- variation of gain with load. ➤ To study phase shift oscillator. ➤ To study Wein bridge oscillator. ➤ To study Hartlay oscillator. ➤ To study Colpits oscillator. ➤ To determine „e" by Millikan"s oil drop experiment. ➤ To determine „e" by Thomsons method. ➤ Determination of Rydberg"s constant. ➤ To study absorption spectrum of Iodine vapors. ➤ To study Raman spectrum. ➤ To identify elements in optical line spectrum. ➤ To determine absorption coefficient of material for gamma rays. ➤ Determination of Hybrid parameters. ➤ Study of monostable multivibrator. ➤ Study of astable multivibrator. ➤ Study of an amplifier - with & without feedback. ➤ Determination of Plank's Constant by using LED. ➤ To study characteristics of Zener diode. ➤ Study of LED characteristics. ➤ Study of characteristics of Laser. ➤ Study of Emitter follower.
B.Sc. III, 6S	Physics	By the end of this Course students should be able to know about: ➤ Statistical Mechanics ➤ Distinguishable & indistinguishable particles, concepts of boson

		&fermions. ➢ Crystallography ➢ Electrical Properties of Materials. ➢ Magnetic Properties of Materials ➢ Superconductivity & Nano Technology By the end of this Course students should be able to know about the Following practical knowledge: ➢ To study crystal models and identification of crystal planes. ➢ To study Characteristics of Photocell ➢ To determine Planck"s constant using photocell ➢ To determine energy gap of semiconductor using four probe method. ➢ To determine activation energy of Thermister. ➢ To determine energy gap of semiconductor using reverse bias method ➢ To study hysteresis losses in transformer core and plot B-H curve. ➢ To measure magnetic susceptibility of solids. ➢ To study thermo emf using thermocouple. ➢ To Determination of temperature coefficient of resistance of platinum using platinum resistance thermometer. ➢ To determine lattice parameter using X-ray diffraction pattern. ➢ To determine half life period of radioactive substance by GM counter ➢ Determination of dislocation density in alkali halide crystals. ➢ Demonstrations- Any 4 demonstrations equivalent to 2 experiments ➢ Mini project equivalents to 2 experiments. ➢ Computer aided demonstrations (Using computer simulations or animations) (Any 2demonstrations equivalent to 2 experiments) ➢ To study characteristics of Photo diode. ➢ To study Zener regulated power supply. ➢ Study of transistorized regulated power supply, series pass transistor. ➢ Determination of velocity of sound by using sonometer wire. ➢ Determination of velocity of ultrasonic wave in liquids. ➢ Determination of Band gap energy of a pn junction / zener diode

Computer Science

B.Sc. I, 1S	Computer Science	➢ Understand Computers and programming concept, operating system of computer ➢ Understand the Introduction to Internet : Direct, Types of Internet connection: Direct dial-up, broadband, Internet

		protocol : TCP/IP, FTP, HTTP, Domain name e-mail address ➢ Understand the Programming Concept : Algorithm flowcharting programming languages, assembler, interpreter, compiler programming process ➢ Understand History, features structure of C program ➢ Understand the I/O Operations : Formatted I/O : Printf ( ), Scanf ( ) , Unformatted I/O :
B.Sc. I, 2S	Computer Science	➢ Understand the basics of Data structure, its types, list, array, stack and Queue ➢ Understand the Linked list & its implementation, traversing, insertion, deletion algorithms, circular Queue ➢ Understand the : Tree : Binary, Binary search tree, tree Traversing : inorder, preorder and postorder, sorting and searching Techniques ➢ Understand the Function : Definition, prototype, local & global variable, function parameter, function calling and return ➢ Understand the String Handling : Declaring and initialization of string variable , operations on string ➢ To understand the : Structure : Definition and declaration , initialization, array of structure, nested structure Union File Handing
B.Sc. II, 3S	Computer Science	➢ Understand the Introduction to data structure linear array, operation on linear array ➢ Understand the queue : definition and concept of queue and operation on queue ➢ Understand the Tree: definition and concept of tree, sorting and searching , bubble sort , selection sort ➢ Understand the object oriented programming : features and application of object oriented programming , introduction of c++ programming managing console I/O ➢ Learn the Function in C++ line function, friends function , Array of object , pointer to object ➢ Learn the operator overloading , Inheritance
B.Sc. II, 4S	Computer Science	➢ Understand the Fundamental of Relational database management , Architecture of database system , database approaches data representation ➢ Understand the Relational model : relation domain and attribute keys E-R diagram , Normalization ➢ Understand the Introduction to SRL: Component of structure query language , data types and operator ➢ Understand the Function : Numeric function, Character function, conversion function ➢ Understand the PL/SQL : Feature and block structure , variable constant , data type cursor and its operation ➢ Understand the Transaction : Roll back and commit and save point , security of database

B.Sc. III, 5S	Computer Science	➢ Understand the .NETPRAMEWORK , NAMESPACES, assembler the common language Implementation ➢ Understand the visual programming , concept of event driven programming ➢ Understand the decision and looping statement ➢ Understand the java feature, evaluation, JDK, JUM. ➢ Understand the classes and inheritance ➢ Understand the string, package and interface their operations
B.Sc. III, 6S	Computer Science	➢ Understand the exception handling multithreading; E conception handling ➢ Understand the applet; introduction to applet, applet lifecycle HTML applet tab with all attributes ➢ Learn the event handling and AWT ; introduction, event delegation model, java AWT ➢ Understand the window application forms ➢ Know the object oriented programming; classes and objects ➢ Work out the data access with ADO.NET

Electronics

B.Sc. I, 1S	Basic Electronics	➢ Ability to understand the principles and constructions of electrical and electronic components. Students can recognize the components and their uses in electronics ➢ To learn about electronics component and their application ➢ Learn circuit using electronic component. The student will get knowledge to analyze the circuit ➢ The student will learn different circuit theorem simplification of circuit will be easier using this theorem. ➢ Learn semiconductor material and its properties. Study some simple semiconductor device.
		➢ To develop practical skill, student have to perform some practical in the Laboratory base on the theory which he studies. ➢ Student will perform various experiments using electronic component. ➢ The student will perform experiment on basic digital gates and some digital circuit. ➢ The student will perform some experiment on semiconductor device.
B.Sc. I, 2S	Digital Electronics	➢ Ability to understand the fundamental constructional knowledge of digital electronics and its applications for developing different digital systems. ➢ Understand basic digital electronic systems ➢ Learn function of basic digital circuits and use of transistors and diode to create logic gates in order to perform Boolean logic. ➢ Learn different theorems for simplification of basic Digital electronics circuits.

		➢ Understand symbols, Truth tables, Boolean equations, & working principle
		➢ Perform practical on some basic semiconductor devices. ➢ Perform experiment on transistor and its characteristic in different modes. ➢ Student will perform experiment on UJT & FET and their application. ➢ Learn & study some advance digital circuit.
B.Sc. II, 3S	Electronic Devices and Circuits	➢ Ability to understand the principles and working of electronics devices. ➢ Students becomes familiar with the working of electronic circuits and their applications. understand Basic Analog Circuits and their applications using Active ➢ Devices Learn basic function of single stage amplifier, multistage amplifier and power Amplifier and their working principle. ➢ Understand basic construction of feedback circuits and their application in Oscillators analog circuits. ➢ The ability to select a suitable measuring instrument for a given application. ➢ The ability to estimate and correct deviations in measurements due to the influence of the instrument and due to the accuracy of the instrument. ➢ Learn basic test instruments such as power supply, function generator, ➢ DFM and CRO and their construction and working principle. ➢ Understand the construction of data convertor circuits and their applications in digital circuits.
		➢ Perform practical on some measuring instrument. ➢ Student will perform experiment on transistor and its application ➢ Student will perform practical on transducers and its application. ➢ Learn and study the oscillator circuits.
B.Sc. II, 4S	Communication Electronics & Microprocessor 8085	➢ Knowledge of the construction of circuits, choose and apply the techniques, resources required for electronic communication and system applications. ➢ Students will also understand architecture of 8085 microprocessor and programming in ALP ➢ Study the basic differential amplifier and their application. ➢ Learn operational amplifier and its characteristics. ➢ Study active and passive filters and its application. ➢ Students understand different types of multivibrator and wave form generator using IC 55. ➢ Students can understand the basic architecture of 8085 microprocessor.

		➢ Study the addressing modes and instructions of 8085. ➢ Study complete instruction set of 8085. ➢ To study various program in assembly language.
		➢ Perform practical on various op amp circuits. ➢ Perform practical on multivibrators using IC 555. ➢ Student perform practical on 8085 programming in assembly language. ➢ Student perform practical on active and passive filters.
B.Sc. III, 5S	Measuring Instruments	➢ Knowledge of the principles and working of electronics instrumentation and medical equipments. ➢ Students become well known with operations of electronics equipments and their applications in electronics lab. ➢ Understand the fundamental concept of semiconductor like crystal structure, energy band gap, charge carrier statistics. ➢ Understand the physics, basic characteristics and operation of semiconductor devices such as p-n junctions and Zener diodes. ➢ Have knowledge of fabrication technology for semiconductor devices and integrated circuits.
B.Sc. III, 6S	Advanced Microprocessor	➢ Knowledge of the principles and working of microprocessor 8086 and microcontroller 8051. Students become able to prepare programs in microprocessor ➢ Students should understand interrupt and interrupt service routine. ➢ Understand I/O interfacing and techniques. ➢ Understand advance microprocessor
B.Voc. Banking and Financial Services		
B.Voc. I, 1S & 2S	Bankingand Financial Services	➢ Retail Banking- Role within bank operation Applicability of retail banking – Concepts & Distinction between Retail and corporate / WholesaleBanking ➢ Customer Requirement Product Development Process Credit Scoring Important Retail Asset Products Credit and debit Cards RemittanceProducts ➢ Delivery Channels in Retail Banking Delivery Models Customer Relationship Management in RetailBanking ➢ Services Standards for Retail Banking Technology in Retail Banking Recovery of Retail Loans Securitization Other Issues in RetailBanking
B.Voc. II, 3S & 4S	Bankingand Financial Services	➢ Concept of business Characteristics of business Classification of business activities Interrelation ship between industry,commerce, trade, Functions of business. ➢ Elements of Marketing Mix Advertising and product Advertising and price Advertising and Place Advertising andPromotion ➢ Newspaper, magazines and journals, Radio Advertising Television Advertising , Cinema Advertising , Direct Mail advertising , Internet ,Yellow Pages , ProductPlacement ➢ Time, stress, and health: A universal challenge Managing time: Guidelines and techniques Social ties: A stress – resistance resource The challengeof building and using social support ➢ Constructive Adjustment Helping and wellness Heroism and

		responsibility Lookingahead
B.Voc. III, 5S & 6S	Banking and Financial Services	➢ Functions of the financial system Classification of Financial Assets Financial Intermediaries Development of Financial in India Limitations of Indian Financial System ➢ Introduction, Concepts Steps involved in leasing transaction Types of lease Factors Affecting lease decision Advantageous & Disadvantageous of Lease Problems of Leasing Leasing in India ➢ Importance Art of conducting and giving interviews Placement Interviews Discipline interview ➢ Case laws on responsibility of paying and collecting banker indemnities of Guarantees Obligation of banker, law relating to Securities Valuation of securities, special features of Recovery of Debts Due to banks and financial institutions Act, 2013 ➢ The legal relationship between banker and customer Unincorporated bodies Financial advice, letters of introduction and other services Rendered by banks Special features of the relationship between banker and customer The mutual rights and duties, Power to combine Different accounts ➢ Introduction, IT applications in banking, computer based information systems for banking Electronic fund management, Electronic commerce and banking Customer relationship managem

B.Voc. Pharmacy Assistant

B.Voc. I, 1S & 2S	Pharmacy Assistant	➢ Student is able to know customer service skills. ➢ Can maintain patience and the ability to remain calm in stressful situations. ➢ Have the ability to work well with others. ➢ excellent verbal communication skills.
B.Voc. II, 3S & 4S	Pharmacy Assistant	➢ Taking inventory of all medication and pharmaceutical supplies. ➢ Processing sales transactions for medications and other pharmaceutical supplies. ➢ Directing all questions relating to prescriptions, health matters, or medications to the pharmacist. ➢ Answering all incoming telephone calls in a professional manner. ➢ Ensuring that work areas are organized and clean.
B.Voc. III, 5S & 6S	Pharmacy Assistant	➢ Become a Pharmacy Assistant. The course provides an opportunity to interact with and learn from highly qualified and experienced professionals. The retail pharmacy is a vital health advisory centre in which graduates play an important role in. ➢ The course assists you to enter a respected profession which continues to grow from strength to strength. ➢ Fast track your growth in one of the fastest rising industries as a Pharmacy Assistant ➢ Technician With experience and a recognised qualification, you could become a senior pharmacy assistant, supervisor or manager. With further training, you could become a pharmacy

B.Voc. Healthcare

B.Voc. I, 1S & 2S		- Stuents are able to help patients to move around. - Students have Knowledgemonitoring patients and performing basic health checks. - Can make patients feel comfortable. - Are able to explain washing and dressing patients.
B.Voc. II, 3S & 4S		- Health professionals play a central and critical role in improving access and quality health care for the population. - They provide essential services that promote health, prevent diseases and deliver health care services to individuals, families and communities based on the primary health care approach. - Mechanisms for optimizing the strengths and skills of health professionals will be essential to achieving the Millennium Development Goals.
B.Voc. III, 5S & 6S		- On a day-to-day basis, support worker duties could include helping with meal preparation, household chores, administering medication, managing finances, accessing community facilities, going shopping, meeting friends, visiting the doctors, finding a job, or providing general emotional support. - Students are able maximize the contributions of health professionals through interprofessional education and collaborative practice. - Can provided technical guidance and develop policy options and tools for enhancing health professionals contribution to health systems strengthening through the primary health care approach.
M.A. Marathi		
M.A. I, 1S	Marathi	- Know the form of Literature i.e.[poetry, Folk literature] - Understand concepts of Poetry and Folk literature. - To know different literary types and analysis then. - To make student aware of literature which contribute in Indianculture. - To know various stages of development of Marathi Language. - To know the nature and purpose of Language. - To know historical study, descriptive study for Linguistic Research.
M.A. I, 2S	Marathi	- Understand the importance of interrelationship between Society and Literature. - Develop ethical thinking. - To criticize the literature - To understand the folk literature. - To know the novel. - To know various stages of development of Marathi Language - Know the concepts of Gandhism, Marxism, Ambedkarism.
M.A. II, 3S	Marathi	Know the form of Literature i.e.[dalit sahity]

		➤ Understand concepts of ancient Marathi Poetry and Sant sahitya . ➤ To know different literary types and analysis then. ➤ To know the nature and purpose of Language. ➤ To know historical study, descriptive study for Linguistic Research. ➤ To know the official writing in Marathi language.
M.A. II, 4S	Marathi	➤ To develop commutation skills and motivate them to make career in Marathi. ➤ Know the form of Literature. ➤ Understand concepts of Poetry and Folk literature. ➤ To know different literary types and analysis then. ➤ To make student aware of literature which contribute in Indian culture. ➤ To know various stages of development of Marathi Language. ➤ To know the nature and purpose of Language. To know historical study, descriptive study for Linguistic Research.

M.A. Sociology

M.A. I, 1S	Classical Sociological Thinkers	➤ To introduce to the students about the major contribution of classical sociologists. ➤ To make familiarize with the theoretical foundations of Sociology on which edifice of modern Sociological theories are erected and to develop critical thinking, analytical ability to interpret the social scenario around them. ➤ To trace the historical roots of these thoughts in the transformation of European society. ➤ To orient to the learners about foundational theories and fundamental concepts of the sociology.
	Methodology of Social Research	➤ To orient to the learners about the basic and fundamental of research methodology ➤ To introduce the basic orientation to the research methodology and methods ➤ To introduce the different types of tools, techniques and methods of social science research
	Rural Society In India	➤ To understand the structure of rural society. ➤ To understand the changing nature of rural society. ➤ To assess the impact of rural development programs on the rural society
	Sociology of Religion	➤ To understand the conceptual clarification ➤ To know about Sociological interpretations of Religion ➤ To Understand the Religion of India ➤ To know about Contestation over Religion in India ➤ To assess the impact of Social change & Religion
M.A. I, 2S	Classical Sociological	➤ To introduce to the students about the major contribution of classical sociologists.

		Thinkers	➢ To make familiarize with the theoretical foundations of Sociology on which edifice of modern Sociological theories are erected and to develop critical thinking, analytical ability to interpret the social scenario around them. ➢ To trace the historical roots of these thoughts in the transformation of European society. ➢ To orient to the learners about foundational theories and fundamental concepts of the sociology.
		Methodology of Social Research	➢ To orient to the learners about the basic and fundamental of research methodology ➢ To introduce the basic orientation to the research methodology and methods ➢ To introduce the different types of tools, techniques and methods of social science research
		Urban Society in India	➢ Define urban sociology and demonstrate the nature and scope of urban sociology. ➢ Develop an understanding about trends of urbanization in India and impact of urbanization on Indian society. ➢ Develop awareness about urban problems and policies adopted to solve such problems.
		Cultural Anthropology and Tribal Studies	➢ Concept of institution of Marriage, kinship and families; their interrelationship in shaping individuals' in the society. ➢ Cultural constructions of kinship; marriage patterns and exchange of different forms Contemporary changes in marriage and family forms Defining and understanding the concept. ➢ Analyzing the nature of change in contemporary society and the changes in future. ➢ Applying the concept of social structure and organization to analyze the contemporary issues
M.A. II, 3S		Theoretical Perspectives in Sociology	➢ Assess Social and Sociological Theories; Phenomenon and Perspectives; ➢ Describe the contributions of Talcott parsons, ➢ Analyse Life & Major Works of Robert Merton ➢ Explain contributions of Dahrendorf, C. W. Mills and Coser ➢ Elaborate on contributions of G. H. Mead, E. Golfman, C. H. Colley
		Sociology of Change and Development	➢ Explain Conceptual Perspective on Development ➢ Describe Theories of Development ➢ Identify paths of Development ➢ Describe interrelationship between social Structures and Development ➢ Describe Development Planning and Policies
		Industrial Sociology	➢ Describe the Nature and Scope of Industrial Sociology; Growth of Industrialization, Industrial Revolution and its impact on Society

			➢ Elaborating on Changing Structure of modern Industrial enterprises and principles of Organization – Formal and Informal
			➢ Describe Trade Union Movement in India; Workers Participation in Management and Collective Bargaining.
			➢ Explain Industrial Conflicts and means of Settlement of industrial Disputes
			➢ Understand Labor Problems – Absenteeism, Alcoholism and Alienation;
			➢ Understand Impact of Globalization on Industry and Labour.
		Crime and Society in India	➢ The causes of criminal behavior.
			➢ The significance of criminal profiling to mitigate crime.
			➢ The consequences of crime in society.
			➢ The elements of criminal justice system.
			➢ The significance of Issues Affecting the quality of life of Women.
M.A. II, 4S		Theoretical Perspectives in Sociology	➢ Assess Social and Critical Theories; Phenomenon and Perspectives;
			➢ Describe the Post Structuralism and Post Modernism,
			➢ To Know about the Recent trends in sociological theorizing
			➢ Explain contributions of Jean Farancois Lyotard
			➢ Elaborate on contributions of Radcliffe Brown, Talcott Persons, R. K. Merton
		Sociology of Economic Development	➢ Describing the Concepts and Indicators of development; Human Development and Economic Growth; Concepts of Social Development, Economic Development, and Sustainable Development
			➢ Explaining the theoretical Perspectives on Development and Contemporary critical perspectives on development
			➢ Interface between Democracy and People's participation for development; Modernization, Globalization and Development.
			➢ Describe Development, Migration and Displacement
		Social Psychology	➢ Define social psychology and related terminology.
			➢ Discuss the relationship between the person and the situation and its influence on attitudes, prejudice, aggression, pro social behavior, and interpersonal relationships.
			➢ Describe the dynamics of group behavior in areas of social influence, such as altruism, conformity, obedience, deindividuation, leadership, intergroup relations, and conflict and cooperation.
			➢ Apply social psychological principles to real-world issues.
		Crime and Society in India	➢ . The causes of criminal behavior.
			➢ The significance of criminal profiling to mitigate crime.
			➢ The consequences of crime in society.
			➢ The elements of criminal justice system.
			➢ The significance of Issues Affecting the quality of life of

		Women.
M.Sc. Chemistry		
Class	Course	Course Outcome
M.Sc. I, 1S	Inorganic Chemistry	In the course Inorganic chemistry the students will be able to understand: ➤ Stereochemistry and Bonding in Main Group elements and Molecular Orbital Theory ➤ Molecular orbital theory of coordination compounds and Metal Ligand Bonding. ➤ Clustering of Metal atoms and hydrides of Boron. ➤ Metal-ligand equilibria in solution and Non-aqueous solvent behavior. ➤ Symmetry and group theory.
	Organic Chemistry – I	In the course organic chemistry the students will be able to understand: ➤ Nature and Bonding in Organic Molecule ➤ Stereochemical Aspects ➤ Reaction mechanism: Structure and Reactivity ➤ Aliphatic nucleophilic substitution and Elimination Reactions ➤ Aromatic Nucleophilic and electrophilic Substitution
	Physical Chemistry – I	In the course Physical chemistry the students will be able to understand: ➤ Quantum chemistry ➤ Surface Chemistry ➤ Thermodynamics ➤ Nuclear chemistry ➤ Chemical Dynamics
	Modern Methods of Separation	In the course General/Analytical chemistry the students will be able to understand: ➤ Basic concepts of Analytical Chemistry ➤ Regression analysis and Statistical analysis of Chemical analysis ➤ Separation techniques like Ion exchange mechanism ➤ Chromatographic Techniques like Gas chromatography and HPLC ➤ Chemical Safety and Handling of Chemicals including explosives and chemical weapon.
	Practical – I Organic Chemistry	In the course Practical Organic chemistry the students will be able to understand: ➤ Organic Synthesis including Single Stage Preparations of organic compounds. ➤ Qualitative Organic Analysis including Separation, purification and identification of binary mixtures. ➤ Quantitative Analysis/ Estimation of some Organic compounds
	Practical – II	In the Course Practical Physical Chemistry the students will be

	Physical Chemistry	able to understand: ➤ Treatment of experimental data, X-Y plots, programs with data preferably from physical chemistry practical. Students will operate two packages I) MS-Word and II) MSExcel in some to the experiments.
M.Sc. I, 2S	Co-ordination Chemistry	In this Course the students will be able to understand: ➤ Electronic Spectra and Magnetochemistry ➤ Reaction Mechanism of Transition Metal complexes- 1 ➤ Reaction Mechanism of Transition Metal complexes -2 ➤ Metal Pi- complexes including Metal carbonyls and Metal nitrosyls ➤ Concept of Bioinorganic chemistry
	Organic Chemistry-II	In the course the students will be able to understand: ➤ Mechanism of Molecular Rearrangement and addition of bonds. ➤ Concept of Free Radical Reaction. ➤ Organic Photochemistry ➤ Pericyclic Reactions ➤ Concept and applications in Green chemistry.
	Physical Chemistry – II	In the course the students will be able to understand: ➤ Chemical Dynamics ➤ Quantum chemistry ➤ Macromolecules ➤ Electrochemistry ➤ Statistical Thermodynamics
	Optical Methods and Environmental Chemistry	In the course the students will be able to understand: ➤ Basic concepts of Optical Methods. ➤ Flame emission and atomic Spectrometry. ➤ Water Pollution ➤ Air Pollution ➤ Soil pollution and Pesticide analysis.
	Practical – III Physical Chemistry	In the Course Practical Physical Chemistry the students will be able to understand: ➤ Treatment of experimental data, X-Y plots, programs with data preferably from physical chemistry practical. Students will operate two packages I) MS-Word and II) MSExcel in some to the experiments.
	Practical – IV Inorganic Chemistry	➤ Preparation of inorganic compounds by greener methods and their characterization by elemental analysis, MW determination, decomposition temperatures and molar conductance studies. ➤ Quantitative analysis of binary mixture of cations involving their chemical separation and separate analysis of one cation by gravimetry and another by volumetric or colorimetric. ➤ Qualitative analysis of inorganic mixture for radicals including interfering radicals and rare earth

	Spectroscopy-I	In the course the students will be able to understand: ➢ Unifying Principle, Microwave Spectroscopy & Reactivity and characteristics of Nano Particles. ➢ Concepts in IR, UV and Visible Spectroscopy. ➢ Concepts in Mass Spectrometry. ➢ Concepts in HNMR and ^{13}C NMR spectroscopy. ➢ Characterization of Organic Molecules.
M.Sc. II, 3S	Analytical Chemistry-I Thermal & Electroanalytical Methods	In the course the students will be able to understand: ➢ Thermal methods of analysis and thermometric titrations ➢ Electroanalytical Methods like High frequency titrations, Electrogravimetry, Coulometry ➢ Chemical, biochemical and biosensors ➢ Electroanalytical Techniques like Polarography and Voltammetry ➢ Bio-analytical chemistry
	Organic Synthesis-I	In the course the students will be able to understand: ➢ Oxidation and Reduction Reactions ➢ Polynuclear hydrocarbons, Non aromatic Heterocycles and Construction of ring systems. ➢ Disconnection'synthons, formation of C-C bond and related reactions. ➢ Umpolung concept, Phosphorus and Sulphur Ylide and Enamines ➢ Modern synthetic methods and Selective organic name reactions.
	Natural Products	In the course the students will be able to understand: ➢ Study of Carbohydrates and Lipids ➢ Study of Enzymes, Amino acids, Proteins and Peptides ➢ Study of Alkaloids and Terpenoids ➢ Study of Steroids and Hormones ➢ Vitamins and Natural Pigments .
	Practical V: Inorganic Chemistry Practical	➢ In the course Inorganic chemistry Practical students will be able to perform Quantative Inorganic Analysis including the experiments like separation identification, estimation of metals, nonmetals by various techniques like spectrometry, complexometry, ion exchange, chromatographic methods etc.
	Practical VI: Organic Chemistry	In this course Practical Organic chemistry, students will be able to carry out: ➢ Multistep Organic Synthesis ➢ Organic Estimations and ➢ Purification of Organic Solvents
M.Sc. II, 4S	Spectroscopy-II	In the course the students will be able to understand: ➢ Raman and Photoelectron Spectroscopy ➢ Electron, neutron and X-ray diffraction

		➤ Electron Spin Resonance spectroscopy ➤ Mossbauer spectroscopy ➤ Determination of Structures of Complex Organic Molecules by Spectroscopic Means
	General Analytical Chemistry	In the course the students will be able to understand: ➤ Radiochemical Methods of analysis ➤ Molecular photofluorescence and phosphorescence spectrometry ➤ Optical Methods & Flow Injection Analysis ➤ Food and Cosmetic Analysis ➤ Forensic &Fuel analysis
	Organic Chemistry	In the course the students will be able to understand: ➤ Application of Organometallics in organic synthesis ➤ Designing the synthesis based on retrosynthetic analysis ➤ Protection and Deprotection of functional groups and Phase transfer Catalysis ➤ Reagents in Organic Synthesis ➤ Heterocyclic Compounds
	Organic Chemistry (Applied and Medicinal Chemistry)	In the course the students will be able to understand: ➤ Polymers, Dyes and Agrochemicals ➤ General aspects of drug ➤ Drugs Design: Classification of Drugs, procedures followed in drug design ➤ Classification of Drugs- I : Antibiotics, Antimalerial, Antipyretic and analgesic etc. ➤ Classification of Drugs- II : Anesthetics, Tranquilizers, Antihistamines, cardiovascular etc.
	Organic Chemistry Special Practical	In this Course the Students will be able to understand: ➤ Qualitative Organic Analysis: Separation, purification and identification of three component mixtures. ➤ Spectral Interpretation and use of Chem draw software ➤ Miscellaneous Experiments (Mandatory) synthesis, estimation of organic compounds.
	Project Work	The students will develop utilities such as analytical spectra, simulation programs that will supplement laboratory exercises in their subject of specialization. Literature survey, Studies of reactions, synthesis, mechanism, isolation of natural products, standardization of reaction conditions, new methods etc.

M.Sc. Botany

Class	Course	Course Outcome
M.Sc. I, 1S	Botany	➤ Knowledge about cell organelles, cell cycle, Chromosomes, Regulation of geneexpression, Mutation, cancer and Genetics of Nitrogen fixation ➤ Explain Karyotype Analysis , Isolate of any cell organelle , perform Smear/Squash Technique/ Specialized Chromosome and solve Problem on interaction of genes

		➢ Explain Concept of Biodiversity, Understand Green revolution, Sanctuaries, National parks, Biosphere reserves. Explain Ex- situ conservation, and General accounts and activities of national institutes. ➢ Identification and morphological description with economic important of plantChemical Characterization of tannins, resins, dyes, fibres. ➢ Isolate and identify algal forms .Brief Classification, reproduction and Economic importance of Algae. Knowledge of Bryophytes. Skill of Microtomy ➢ Explain features of plant development, Organisations of SAM Knowledge of plant reproduction.
M.Sc. I, 2S	Botany	➢ Explain polyploidy and Plant Breeding,Physical mapping of genes on chromosomes. Explain Gene expression and its regulation in Eukaryotes.Use of Molecular markers. To know about Molecular Biology and Bioinformatics ➢ Achieve skill in Isolation and Estimation of DNA by UV-VIS spectrophotometry. Perform Biostatistical analysis of given data ➢ Explain important bacterial, viral diseases of regional crops. Understand Fungi as Biological Agent. Identify and classify Fungal cultures and plant disease material with its diagnostic characters. ➢ Brief account of Photosynthesis, Respiration, Growth Regulators and Elicitors ➢ Perform major and minor physiology and plant metabolism experiments. Explain Principles and working of instruments. Perform Phytochemical tests. ➢ Explain Carbohydrate, Amino Acid , Lipid, Nitrogen and PhosphateMetabolism
M.Sc. II, 3S	Botany	➢ Outline Classification and knowledge of anatomy and reproduction Pteridophyta. ➢ Explain Classification of gymnosperms along with Morphology, anatomy, reproduction and evolution in gymnosperms Make double stained permanent micropreparation ➢ Explain Systems of Angiosperm classification, Taxonomic hierarchy DiffertantiateEcads& Ecotypes ➢ Explain Systematic studies of Dicot and Monocot families. Write Systematic description of angiospermicplant species. And Identify Fossil Specimens. ➢ Explain Mycorrhizae ,Human diseases caused by dermatophyte Describe Industrial production of Penicillin, Enzymes and Fungi in medicine ➢ Understand Koch's Postulate - Principles and method Demonstrate Koch's postulate and pure culture technique.

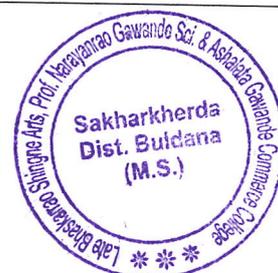| Class	Course	Course Outcome
		Identify and describe fungal plant diseases. Identify and give salient features of fungi from the mix culture.
		➤ Understand Integrated Pest management (IPM),Diseases of cereals Know General account of postharvest diseases of vegetables and fruits Clear ideas of Viral diseases
		➤ Identify, classify and describe fungi from given seed borne mycoflora, soil mycoflora, Rhizospheremycoflora.
M.Sc. II, 4S	Botany	➤ Understand effects of Ecological factors, Community concept, Types and mechanism of ecological succession Differentiate between Abiotic and biotic components Gain knowledge of Major Biomes of the world.
		➤ Understand EIA, Effect of solid waste disposal on soil, Consequences of water pollution
		➤ Know Disaster management,Impact of urbanization
		➤ To measure rainfall. Transparency of water. To evaluate the soil texture and estimation of pH of water and soil
		➤ Knowledge of Plant Cell and tissue culture, Clonal propagation, GMOs,Phytoremediation.
		➤ Importance and application of microbes in Biotechnology
		➤ Skill for Bacterial cultures and maintenance of Cell lines. Know Aims and strategies for transgenic development. Brief aboutaccount of Alien gene transfer Understand Gene Knockout Technologies.
		➤ Preparation of stock solution and culture media. Isolation and estimation of Bacterial genomic DNA
		➤ Understand the various aspects of Botany by working on different problems given by their supervisor. Use various techniques that they do in their projects. Observe the scientific things very closely. Apply their knowledge practically. Write the dissertations and research paper

M.Sc. Mathematics

Class	Course	Course Outcome (After completing the course, students will able to........)
M.Sc. I, 1S	Real Analysis	➤ Determine the Riemann integrability.
		➤ Learn Sequence and its properties.
		➤ Know Rearrangement of Series and its properties.
		➤ Understand Functions of Several variables and Differentiation.
		➤ Learn Inverse function theorem and Implicit function theorem.
		➤ Solving examples of Lagrange's multiplier method.
	Advanced Abstract Algebra	➤ Understand Normal Subgroups, Automorphism.
		➤ Learn Permutation groups and Sylow theorem. Learn Ideals and its properties.
		➤ Understand Nilpotent and Nil ideals
		➤ Learn Unique factorization domain and its properties.

		➢ Know Modules and its properties.
	Complex Analysis	➢ Learn Complex Integration and Fundamental theorem of Algebra. ➢ Understand Taylor's theorem , Open mapping theorem and Cauchy Goursat theorem. ➢ Learn Singularities and its types. ➢ Learn Residue and its properties. ➢ Learn Schwartz reflection theorem.
	Topology – I	➢ Learn Cardinal and Ordinal numbers. ➢ Understand Topological Spaces. ➢ Learn Connectedness and Compactness. ➢ Learn Separation and Countability Axioms. ➢ Understand Separation and Countability Axioms contd.
	Differential Geometry	➢ Understand Local intrinsic properties of surfaces. ➢ Know Families of curves. Learn Geodesics curvature and its properties. ➢ Learn Tensor calculus and tensor product of vector spaces. ➢ Explain Differential Manifolds and its properties.
M.Sc. I, 2S	Measure and Integration Theory	➢ Understand Lebesgue outer measure and measurable functions. ➢ Understand Integration of non negative function and Lebesgue Integral. ➢ Learn the Four derivatives and Lebesgue differentiation. ➢ Understand Measures and outer measures and extension of measures. ➢ Learn uniqueness of extension and its properties and inequalities.
	Advanced Linear Algebra and Field Theory	➢ Learn Canonical forms, Eigen values and Eigen Vectors ➢ Learn Quadratic forms and normal form of real quadratic form. ➢ Understand Algebraic extension of fields. ➢ Understand Normal and separable extension and its properties ➢ Learn Galois theory and applications.
	Integral Equations	➢ Understand Definition of Integral equation and its types. ➢ Learn Eigen Values and Eigen function, Iterated Kernels, resolvent kernels ➢ Learn Neumann Series and method of successive approximation of solving ➢ Volterra integral equation. Understand Applications of Integral equations and Greens function.

		Topology – II	- Understand Metric spaces as topological spaces. - Learn the Complete metric spaces. - Understand Product spaces. - Understand Functions and Quotient spaces. - Learn the Metrization and pracompactness.
		Riemannian Geometry	- Learn Riemannian metric and its properties. - Determine Christoffel symbol of first and second kind. - Understand Parallel vector fields and Geodesic, Curvature tensor and its properties. - Understand Ricci tensor and Einstein tensor and its properties. - Understand Riemannian curvature and space of constant curvature.
	M.Sc. II, 3S	Functional Analysis – I	- Differentiate Normal linear spaces and Banach Spaces. - Learn Basic properties of finite dimensional normed linear spaces and compactness. - Understand Boundedness theorem and Hahn Banach theorem. - Learn Reflexive spaces and solvability of linear equations in Banach spaces. - Understand Inner product spaces and Hilbert spaces.
		Advanced Mechanics	- Understand Variation principle and Lagranges equations. - Understand Generalized coordinates, Halonomic and non Holonomic system. - Learn Legendre transformations and the Hamiltonian equations of motions. - Learn Canonical transformations and its examples. - Understand the Hamiltonian Jacobi equation for Hamilton's principle function.
		Operational Research	- Understand Operation research and its scope. - Learn Integer programming. Learn Parametric linear programming. - Learn Queing systems and basic properties. - Understand Game and strategies and its properties.
		General Relativity	- Understand the theory of Einstein's relativity - Learn the Schwarzschild exterior solution and its isotropic form. - Learn the Schwarzschild interior solutions. - Understand the Gravitational collapse of spherical body. - Understand the Gravitational waves and its properties.
		Difference Equations-I	- Understand the difference operator and Generating function. - Learn the Linear Difference Equations.

		➤ Know the Z-transform and its properties. ➤ Understand the stability of linear and non-linear systems. ➤ Analyze the asymptotic methods.
M.Sc. II, 4S	Functional Analysis –II	➤ Understand Riesz representation theorem and reflexivity of Hilbert spaces. ➤ Learn Spectral properties of bounded linear operators and Compact linear operator ➤ Learn Spectral properties of bounded self adjoint linear operators. ➤ Learn Positive operators and spectral family.
	Partial Differential Equation	➤ Learn Curve and surfaces,genisis of first order PDE ➤ Learn the Quasi linear equations. ➤ Know one dimensional wave equation and its properties. ➤ Understand Laplace equation and its types ➤ Understand Heat conduction problem and Kelvin inversion theorem.
	Numerical Analysis	➤ Understand Solution of Algebraic and transcendental equations. ➤ Learn Finite differences and its properties. ➤ Learn Numerical differentiation and Integration. ➤ Understand Solution of system of linear equation. ➤ Understand Numerical solution of Ordinary Differential Equation.
	Relativistic Cosmology	➤ Understand Einstein field equation with cosmological term. ➤ Understand Cosmological principle. ➤ Understand Motion of particle and light rays in R-W model. ➤ Understand Fundamental equation of dynamical cosmology and Gravitational lensing.
	Difference Equations-II	➤ Learn the Self-adjoint Second Order Linear Equations. ➤ Solve the Sturm-Liouville Problems. ➤ Understand the Discrete Calculus of Variation. ➤ Solve the Boundary Value Problems for Non Linear Equations. ➤ Understand the Discretization of partial differential equations.

M. Sc. Physics (CBCS)

Class	Course	Course Outcome (After completing the course, students will able to……..)
M.Sc. I, 1S,2S	Mathematical Physics	➤ 1.explain vector spaces and transformations, the algebra of matrix,

		partitioning of matrices; solve the eigen value problem.
		➢ 2. define and analyze limits and continuity for complex functions as well as consequences of continuity; apply the concept and consequences of analyticity and the Cauchy-Riemann equations; analyze sequences and series of analytic functions and types of convergence.
		➢ 3. obtain the general solution of a homogeneous linear constant-coefficient second-order differential equation; classify and explain the functions of different types of differential equations; explain the properties of Legendre Polynomial which may be solved by application of special functions.
		➢ 4. recall the power series method in solving differential equations, and know how to check the correctness of the result; solve differential equations like Legendre, Bessel and Hermite that are common in physical sciences.
		➢ 5. solve transfer functions in Instrumentation using Laplace transforms and apply Fourier transforms in various physical problems.
	Classical Mechanics	➢ 1. explain the basics of Newtonian mechanics and its limitations; state the conservation laws and theorems.
		➢ 2. describe the motion of a mechanical system using Lagrange and Hamilton's formalism.
		➢ 3. explain the motion of particle in central force field.
		➢ 4. describe the stability of circular orbits, its classification and differential equation, derive Kepler's laws.
		➢ 5. explain the classical background of

			quantum mechanics and get comfortable with Poisson brackets and Hamilton - Jacobi equation; develop the understanding of canonical transformation and small oscillations
	Quantum Mechanics		➤ 1. be familiar with the main aspects of the historical development of quantum mechanics and be able to discuss and interpret experiments that reveal the wave properties of matter, as well as how this inspired replacing classical mechanics with a wave equation; ➤ 2. gain the knowledge about quantum mechanical axioms and the matrix representation of quantum mechanics; ➤ 3. solve the Schrödinger equation on their own for simple systems in one to three dimensions, both analytically and by using robust numerical methods; use these solutions to calculate their time evolution, associated probabilities, expectation values, and uncertainties, as well as give concise physical interpretations and reasoning underlying the mathematical results; ➤ 4. grasp the concepts of angular momentum and spin, as well as the rules for quantization and their additions; ➤ 5. distinguish between Schrodinger, Heisenberg and Interaction representations; use commutation relations to explain the outcome of measurements and apply Variation method to obtain the ground state energy of various systems and WKB method for one dimensional problems
	Computational Methods and Programming		➤ . 1. iteratively find the roots of smoothly varying functions with nonzero derivatives; carry out matrix operations, including inverses and determinants.

		➢ 2. solve systems of linear equations using multiple methods, including Gaussian elimination and matrix inversion; determine eigenvalues and eigenvectors; use numerical methods for interpolation, finding roots of equations and curve fitting. ➢ 3. use numerical differentiation and integration for problems in physics; numerically, solve ordinary differential equations with boundary value problems. ➢ 4. independently program computers using high level programming language (C-programming). ➢ 5. formulate and computationally solve the selected problems in physics using C-programming.
	General Lab	➢ 1. organize and assemble • Experiments on Mechanics • Experiments on Optics • Experiments on Modern Physics ➢ 2. perform data acquisition using assembled experiment. ➢ 3. engage in experimental troubleshooting with teaching assistants. ➢ 4. identify sources of error and fluctuations in the collected data. ➢ 5. construct graph on graph paper and also using computer based the collected data. ➢ 6. analyze the collected data. ➢ 7. distinguish between theoretical predictions and experimental measurements. 8 8. verify the fundamental laws and universal constants in Mechanics, Optics and Modern Physics
	Computer Lab	➢ 1. Read, understand and trace the execution of programs written in C language.

		➤ 2. Write the C code for a given algorithm. ➤ 3. Write programs that perform operations using derived data types. ➤ 4. Solve an algebraic or transcendental equation using an appropriate numerical method. ➤ 5. Develop and execute of C-language based programs. ➤ 6. Formulate codes to solve theoretical problems in physics using various computational tools
M.Sc. II, 3S,4S	Electrodynamics	➤ 1. solve electrostatic potential; Poisson and Laplace equations; Electrostatic energy density; electric energy of a charge distribution. ➤ 2. solve boundary value problems with the help of Poisson and Laplace equations; Green's function. ➤ 3. apply Biot-Savart Law and Ampere's law for straight wire, loop, solenoid, toroid, current sheet; Magnetic moment, magnetic force and torque on a circuit. ➤ 4. solve the multipole expansion of potential and field; Material media, boundary conditions; Dielectric sphere in uniform field; Susceptibility and polarizability, and apply to molecular model. ➤ 5. estimate time varying fields; scalar and vector potentials, gauge invariance, wave equations and to solve Poynting theorem.
	Quantum Mechanics II	➤ 1. derive from first principles, the expression for the first and second order energy shifts due to a perturbation for the non-degenerate and degenerate states and use this expression for obtaining fairly accurate energies corresponding to these states of

		perturbed systems;
		➤ 2. solve the time dependent perturbation problems for quantum systems and predict the consequences; understand the possibility stimulated emission in the atomic systems as a result of interaction with the electromagnetic radiation.
		➤ 3. understand the quantum theory of scattering and apply it to gain the knowledge about low and high energy physics scattering phenomenon.
		➤ 4. construct the wave functions for the systems of identical particles; relate the symmetry property of the wave function to the spin of the particles (Bosons and Fermions) and applicability of Pauli's exclusion principle.
		➤ 5. explain the KG equation and Dirac's equation (relativistic wave equations) and its free-particle solutions; be able to explain the KG equation (relativistic wave equation) and its free-particle solutions.
	Solid State Physics	➤ 1. describe Single Crystal and Poly Crystals, Crystal Symmetry, Symmetry Elements, Crystal Types, Bravais Lattices.
		➤ 2. use different X-ray techniques.
		➤ 3. interpret the Powder Photograph; Bernel Chart; Brllioun Zones.
		➤ 4. discuss the inter-Atomic Forces Cohesive Energy of a Solid; Infrared Absorption by Ionic Crystal Lattice; anharmonicity and thermal Expansion.
		➤ 5. study the Dulong and Petit Law, Lattice Specific Heat, Einstein and Debye Theories, Electronic and Lattice Contributions to Specific Heat.

	Network Theorems and Solid State Devices	1. analyze the circuits using Kirchhoff's law and network simplification theorems.
		2. explain and understand the physical concepts underlying the operation of semiconductor devices; have ability to design and analyze simple FET and MOSFET amplifier circuits.
		3. design and analyze simple rectifiers and voltage regulators using diodes; have ability to design and analyze simple circuits using semiconductor switching devices like triac, diac and SCR.
		4. design and analyze simple BJT amplifier circuits; design and analyze simple BJT oscillator and multi-vibrator circuits.
		5. understand the construction, working and uses of various transducers; understand the construction and operation of basic measuring instruments.
	Lasers and Laser Applications	1. discuss the Spontaneous emission, Stimulated emission, Population inversion, Fabry Perot etalon.
		2. analyse Two level laser system, Threshold for three and four level laser systems.
		3. apply solid state lasers, Semiconductor lasers, High power laser systems.
		4. apply Raman scattering; Non-linear interaction of light with matter; Laser induced multi-photon processes.
		5. apply Ultra high resolution spectroscopy; Optical fibers; Light wave communication and material processing.

	Laboratory Course-1	➤ 1. organize and assemble • Experiments on Laser/ Solid State Physics • Experiments on Modern Physics • Experiments on Nuclear Counters ➤ 2. perform data acquisition using assembled experiment. ➤ 3. engage in experimental troubleshooting with teaching assistants. ➤ 4. identify sources of error and fluctuations in the collected data. ➤ 5. construct graph on graph paper and also using computer based the collected data. ➤ 6. analyze the collected data ➤ . 7. distinguish between theoretical predictions and experimental measurements. 8. verify the fundamental laws of Modern Physics.
	Laboratory Course-2	➤ 1. analyze the characteristics of different electronic devices such as diodes, transistors etc., and design simple circuits like rectifiers, amplifiers etc. ➤ 2. measure voltage, frequency and phase of any waveform using CRO. ➤ 3. generate sine, square and triangular waveforms with required frequency and amplitude using function generator. ➤ 4. engage in experimental troubleshooting of electronic circuit.

M.Sc. (Zoology)

	Animal Structure and Function (Non-Chordata)	➤ CO1: Describe different trends in biosystematics. ➤ CO2: Classify invertebrates by using different methods and development of different cladogram and phylogram ➤ CO3: Describe different systems in all phyla of nonchordates ➤ CO4: Describe development of the
M.Sc. I, 1S,2S		

			nonchordate systems according to their evolutionary aspects.
	Animal Structure and Function (Chordata)		➤ CO1: Describe different types of taxonomic characters and rules and operative principles of International Code of Zoological Nomenclature. ➤ CO2: Describe the endoskeletal system of Chordates. ➤ CO3: Study of different systems throughout the vertebrate series as per their adaptations in different habitat. ➤ CO4: Describe adaptations for vital processes of feeding, flying etc.
	Gamete Biology		➤ CO1: Study of the spermatogenesis and oogenesis in eukaryotes. ➤ CO2: Study of different events and their mechanisms during fertilization and consequent changes afterwards. ➤ CO3: Describe assisted reproduction techniques to overcome infertility. ➤ CO4: Describe Ex vivo and In vivo gene therapy etc.
	Genes and Differentiation		➤ CO1: Describe cell specification and differentiation in whole vertebrate series. ➤ CO2: Study of different body axis formation in Drosophila, Amphibia and Chick ➤ CO3: Study of various methods for contraception. ➤ CO4: Describe Biology of sex determination. ➤ CO5: Study of stem cells, their properties, types markers and disorders etc
	Lab I		➤ CO1:Enzymology enables to understand the role and activities of various enzymes functioning in the body. ➤ CO2:It also gives some idea about clinical and pharmaceutical applications

		of enzymes.
		➤ CO3: It trains the students to carry out laboratory exercises related to enzyme activity and estimations of enzymes.
		➤ CO4:Biostatistics trains the students in handling and analyzing the biological clinical data.
	Lab II	➤ CO1: Molecular Immunology gives the knowledge of biological defence processes through the investigation of molecular mechanisms.
		➤ CO2: It enables to understand the physiological and molecular mechanisms that occur in the body during host defence to parasitic infections.
		➤ CO3: It gives an idea about various aspects of vaccines and their development.
		➤ CO4: Trains the students to perform laboratory exercises in Molecular Immunology that is applicable to medicine and pharmaceutical industry
M.Sc. II, 3S,4S	Molecular Cell Biology	➤ CO1: Study of Biomembranes and extracellular matrix.
		➤ CO2: Study of various cell surface receptors.
		➤ CO3: Study of Cell Signalling and Cell cycle control.
		➤ CO4: Describe cytoskeleton in the form of microfilaments and microtubules.
		➤ CO5: Study of secretory pathways in eukaryotic cells.
	Tools and Techniques in Biology	➤ CO1: Study of principles and uses of techniques in Biology.
		➤ CO2: Study of principles and applications of advanced microscopes.
		➤ CO3: Study of microbiological techniques.
		➤ CO4: Describe cryotechniques and

			cryopreservation of cells, tissues and organisms.
			➤ CO5: Study of Radioisotope and mass isotope techniques in biology.
	Endocrinology		➤ CO1: Study of histology and histophysiology of different endocrine glands.
			➤ CO2: Study of classification of hormones and their actions at cellular as well as genetic level.
			➤ CO3: Study of regulation of the processes in organism by hormones.
			➤ CO4: Describe synthesis, transport and metabolism of steroid and nonsteroid hormones.
			➤ CO5: Study of hormones of different endocrine glands and relative diseases.
			➤ CO6: Study of hormone replacement therapy and neuroendocrine mechanisms in different animal.
	Environment and Ecology		➤ CO1: Study of environment and their biotic and abiotic interactions.
			➤ CO2: Describe population ecology in terms of diversity indices along with growth curves, demes and dispersal.
			➤ CO3: Study of community ecology, ecological succession, ecosystems.
			➤ CO4: Describe environmental pollution and effects on nature, global warming global dimming.
			➤ CO5: Study of conservation biology through sanctuaries, National parks, Project Tiger and Biosphere reserves.
			➤ CO6: Study of toxicological effects of pesticides and remedial aspects of it.
			➤ CO7: Study InterGovernment Poliicy/Protocol for Climate change, Intellectual Property Rights and Environment Impact Assessment Processes

	Lab III	➢ CO1: Molecular Cytogenetics gives the knowledge of biological mechanisms of variations and heredity. ➢ CO2: It also gives an elementary idea about different hereditary diseases and syndromes and their inheritance. ➢ CO3: It trains the students to perform laboratory exercises in cytogenetics.
	Lab IV	➢ CO1: Molecular Biology gives the knowledge of biological processes through the investigation of molecular mechanisms. ➢ CO2: It enables to understand the chemical and molecular processes that occur in and between cells. ➢ CO3: It also provides knowledge about the theoretical processes related to drug development. ➢ CO4: Trains the students to perform laboratory exercises in Molecular Biology that is applicable to medicine, forensics and pharmaceutical industry.

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Programme outcomes for all programmes offered by the institution

Programme outcomes for all programme offered by the institution are stated and displayed on the college website and communicated to teachers and students. The outcomes are also reflected in the newspapers, social media, results, certificate of participation so that other students can inspire and try to follow the footsteps of successful students. Attainment of Programmes outcomes are of immense help to improve teaching efficiency after maintaining students progress. Programme outcomes for all programs are stated as under:

Sr.No	Programmes	Programme Outcomes
1	B.A.	At the end of the B.A Programme, graduates will be able to ➢ To develop students for critical thinking ➢ To prepare student for social responsibility ➢ To develop among students feeling of national integration ➢ To make student aware of importance of Indian Culture. ➢ To make student aware of Indian history ➢ To have more knowledge about Indian political system. ➢ To study the social structure of Indian society. ➢ To know about woman health problems and remedies for it. ➢ To develop reading and writing skill in English Language. ➢ To study the different human feelings and analysis them.
2	B.Com.	At the end of the B.Com Programme, graduates will be able to ➢ Have comprehensive knowledge of Finance, Accounting, Taxation and Business laws. ➢ Equip with professional, inter personal and entrepreneurial skills. ➢ Gear up with updated knowledge in implementing business practices ➢ Prepare for post graduate studies and to achieve success in their professional careers. ➢ To develop and sharpen critical and creative thinking and analytical and problem solving abilities and skills of the students. ➢ To prepare students for the responsibilities and opportunities of career with corporate world.
3	B.Sc.	At the end of the B.Sc. Programme, graduates will be able to ➢ Understood the basic concepts, fundamental principles, and scientific theories related to various scientific phenomena and their relevance in routine life. ➢ To inculcate Scientific Aptitude among the students ➢ To make them aware of Environment and living things. ➢ To make them to use Scientific logics and Soft Skills

		➤ Developed various communication skills such as reading, listing, speaking, etc., which we will help in expressing ideas and views clearly and effectively. ➤ Acquired skills in handling scientific instruments, planning and performing laboratory experiments noting down the observations and drawing logical inferences from them.
	B.Voc. Banking and Financial Services	➤ Ability to analyze and solve business problems using statisticaltechniques ➤ Skill in practical applicability of Money Markettransactions ➤ Skills in effective business communication andmanagement ➤ Knowledge in statistical tools and techniques, banking principles andpolicies
	B.Voc. Pharmacy Assistant	➤ **Pharmacy Assistant Knowledge:** Possess knowledge and comprehension of the core and basic knowledge associated with the profession of pharmacy Assistant, including biomedical sciences; pharmaceutical sciences; behavioral, social, and administrative pharmacy sciences; Health workers. ➤ **Planning Abilities:** Demonstrate effective planning abilities including time management, resource management, delegation skills and organizational skills. Develop and implement plans and organize work to meet deadlines. ➤ **Problem analysis:** Utilize the principles of scientific enquiry, thinking analytically, clearly and critically, while solving problems and making decisions during daily practice. Find, analyze, evaluate and apply information systematically and shall make defensible decisions. ➤ **Modern tool usage:** Learn, select, and apply appropriate methods and procedures, resources, and modern pharmacy assistant-related computing tools with an understanding of the limitations. ➤ **Leadership skills:** Understand and consider the human reaction to change, motivation issues, leadership and team-building when planning changes required for fulfillment of practice, professional and societal responsibilities. Assume participatory roles as responsible citizens or leadership roles when appropriate to facilitate improvement in health and well- being.

| 4 | B.Voc. Healthcare | ➢ **PO 1: Problem analysis:** Ability to asses, analyze and treat patients with various diseases and disorders in the field of Physiotherapy and Rehabilitation sciences.
➢ **Design/development of Treatment Protocol:** Design and implement treatment protocol for various disease and disorders according to the need of the patients with appropriate consideration of functional and environmental needs.
➢ **Knowledge Application:** Apply the concepts of Anatomy, physiology and kinesiology in professional Physiotherapy Practice and select various exercise therapies and Electrotherapeutic techniques for prevention and Treatment of various conditions.
➢ **Case studies and clinical Trial:** An ability to design and conduct clinical trial, analyze data and provide well informed conclusions on a given study.
➢ **Evidence Based Practice:** Employ critical thinking and evidence-based practice to make clinical decisions about physical therapy services. Also collaborate with patients, caregivers, and other health care providers to develop and implement an evidence-based plan of care that coordinates human and financial resources.
➢ **Professional Conduct:** Able to work professionally in the field of physiotherapy and maintain good intrapersonal and interpersonal skills. |
| 5 | M.A. Marathi | ➢ Have the details of important landmarks of development of it PG subject since ancient time.
➢ Critically evaluate the works of various authors or social scientists by considering the strength and weakness and suggestions probable modifications for improvement.
➢ Understood how the developments in the field of Humanities have improves the quality of life and how they have satisfied the aspirations, intensions likes and dislikes and how they could modify them.
➢ Realize how the studies in Humanities have led to various social, economical, political changes over last few centuries.
➢ Able to predict the future course of the developments in the subject and the various factors that are likely to influence them and how they will change the life of common man.
➢ Taken up an independent research project, plan and execute it and present the results and conclusions systematically at the end.
➢ Taken up independent creative writing or various aspects in literature, social, economic political, environmental issues in the form of story, poetry, research articles, reports, etc in |

		various periodicals & journals. ➢ Recognized that studies in humanity will dissolve differences & inequalities due to caste, creed and religion, social status etc leading to human dignity which will help to create social & national integration. ➢ Participated & led various activities related to literature & social issues in order to create social awareness and harmony. Faculty of Arts/ Humanities/ Social Sciences
6	M.A. Sociology	➢ To sensitize the learners about the Indian society with a discussion on its structure and institutions. ➢ To aware the learners about the processes, issues, and social problems faced by the society. ➢ To understand the processes of growth change, and development of rural as well as urban society. ➢ The sociological knowledge provides students scientific outlooks and attitudes to understand the human behavior, social issues and phenomena ➢ Acquiring sociological knowledge in the forms of theories and methods would make students good social scientists. ➢ The sociological knowledge would help to make students, critical and logical. ➢ Students would be able to get employment opportunities in the Teaching, Research and NGOs and Private sectors.
7	M.Sc. Chemistry	At the end of the programme, the students will be able to: ➢ Having a clear understanding of the subject related concepts and of contemporary issues. ➢ Having problem solving ability- to assess interaction of Chemicals and chemistry related to social issues (societal, health, safety, legal and cultural) and engineering problems. ➢ Having cross cultural competency exhibited by working as a member or in teams. ➢ Having a good working knowledge of communicating in English.
8	M.Sc. Botany	➢ Scientific Knowledge, Experimental and Research Skills: The students must be able to demonstrate fundamental and advance concepts in science and apply it in relative specialised areas like research, teaching and government/social/public services. ➢ Critical Thinking & Problem Solving ability: The students must be able to employ critical thinking and problem solving skills to find appropriate solutions for the scientific and research problems in the fields related to the subject they studied. ➢ Project Management: The students must be able to identify and mobilize the appropriate resources to manage and complete the undertaken project by observing responsible &

		ethical conduct and also with laboratory safety and hygiene.
		➤ Environmental and Societal Consciousness: The students must be aware about the environmental & the societal problems and must be capable to use and demonstrate the scientific knowledge to address these problems and to undertake research problems
		➤ Ethics and Human values: The students must be capable to think and behave rationally on the ethical issues they come across at their work place. Also, the students should adopt human values to keep harmony with individuals and with human beings.
		➤ Lifelong Learning: The students should adopt lifelong learning to keep pace with emerging trends in academics, research and developing technology.
9	M.Sc. Mathematics	On completion of PG in Mathematics students will able to: ➤ Critical Thinking: Formulate coherent arguments; critically evaluate practices, policies and theories by following scientific approach to knowledge development. Critically evaluate ideas, evidence and experiences from an open-minded and reasoned perspective. ➤ Problem Solving Skills: This programme also offers training in problem solving skills. ➤ Analytical & Logical thinking: The student will be able to develop logical reasoning techniques and Techniques for analyzing the situation. ➤ Advanced Algebra: The students shall appreciate the necessity of various Algebraic structures with binary operations such as Group, Ring, Non-commutative ring that lead to new ideas in algebra for their future research in advanced topics of algebra. ➤ Analysis:The student shall get an insight in the behavior of curves defined on a closed and bounded interval and some important properties of continuous, monotonic, and differentiable functions defined on a closed and bounded interval and also their metric space analogues. ➤ Numerical Techniques:The student will be able to learn some useful approximation and interpolation techniques in Mathematics. ➤ Difference Equation:The student will learn concepts different transforms like z-transform, analyzing research oriented BVP. ➤ Understanding Ability:Student will develop ability for generation of mathematical model to a given real life

		situation as well as learning new areas of mathematics in future either for teaching or for research.
		➢ Getting Abilities:Demonstrate the ability to conduct research independently and pursue higher studies towards Ph.D. degree in mathematics.
		➢ Application of knowledge:The student shall able to apply the knowledge acquired in mathematics in Science, technology as well as research and its extensions.
10	M.Sc. Zoology	➢ PO1. Knowledge of various branches of Zoology and in particular Molecular Biology for Postgraduate studies is made possible.
		➢ PO2 .This higher studies make the student for widening the horizon of knowledge for the sustenance of the stakeholders.
		➢ PO3. Awareness and relative action to reduce the hurdles of the lives of people through the steps for reduction of pollution and global warming.
		➢ PO4. Students acquainted to the skills in handling the instruments and different techniques through the practicals and developing the scientific temperaments for research.
11	M.Sc. Physics	➢ 1. Gain advanced knowledge, general competence, and analytical skills that are required in industry, consulting, education, and research.
		➢ 2. Instill an inquisitive mindset in the students so that they are capable of independent and critical thinking.
		➢ 3. Get trained in such a way that they can objectively carry out investigations, scientific and/or otherwise, without being biased or without having any preconceived notions.
		➢ 4. Apply the knowledge and skill in the design and development of Electronics circuits to fulfil the needs of Electronic Industry.
		➢ 5. Become professionally trained in the area of electronics, optical communication, nonlinear circuits, materials characterization and lasers.
		➢ 6. Develop research problems related to Physics and Materials characterization and applications.
		➢ 7. Get nurtured as good researchers in the field of

		technology too.
		➤ 8. Demonstrate highest standards of Actuarial ethical conduct and Professional Actuarial behavior, critical, interpersonal and communication skills as well as a commitment to life-long learning.

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Programme Specific Outcome (PSOs)

Faculty of Arts, Commerce and Science

Level/Program	Subject/Department	Program specific outcome
UG	English	➢ Identify and become familiar with the scope, methodology and application of modern English and learn to appreciate its ability to explain various aspects. ➢ Understand theoretical and practical concepts of English commonly used in most fields. ➢ Design and carry out scientific experiments and record the results of such experiments in Learning English Language. ➢ Understand the function of different speech organs. ➢ Explain how English is useful for social, Professional life.
UG	Marathi	➢ Create an interest in literature. ➢ Availing the job opportunities in translation, transformation and Media. ➢ Developing the language. ➢ Increasing the critical attitude about literature studies. ➢ Understand the interrelation between literature and society. ➢ Understand the nature of language and literature. ➢ Contemporary writers, poets understand the flow of thought. ➢ Information about phonetics.
UG	Marathi Literature	➢ Students should be introduced to this literary type of ideological essay poetry. ➢ The rules of Marathi writing should be understood from this study. ➢ It is expected that they will be able to print. ➢ It is expected that the students will be able to study the literary genres of novels and poems in a meticulous manner, be able to express themselves, take notes, write essays and evaluate literary works.
PG	Marathi	➢ To make students learn various literary streams, their nature, scope etc. ➢ To go through the contemplation by numerous thinkers on human life, values, and human problems expressed in Marathi. ➢ To enhance empathy, inclusiveness, tolerance and human values. ➢ To make the students study multi-disciplinary aspects of Marathi. ➢ To learn about Marathi culture with its variety and plurality vis a vis Indian culture. ➢ To develop commutation skills and motivate them to make career in Marathi.
UG	Hindi	➢ Create an interest in literature. ➢ Availing the job opportunities in translation, transformation and Media. ➢ Developing the language.

		➤ Increasing the critical attitude about literature studies. ➤ Understand the interrelation between literature and society. ➤ Understand the nature of language and literature. ➤ Enhance the interest in Sanskrit language. ➤ Information about phonetics. ➤ Develop various language skills.
UG	Pali & Prakrit	➤ Create an interest in literature. ➤ Availing the job opportunities in translation, transformation and Media. ➤ Developing the language. ➤ Increasing the critical attitude about literature studies. ➤ Understand the interrelation between literature and society. ➤ Understand the nature of language and literature. ➤ Enhance the interest in Pali language. ➤ Information about phonetics. ➤ Develop various language skills. ➤ Apply the message of Jatak Kathas in their life. ➤ Learn morality through Dhammapada. ➤ Know Buddha's life through Vinayapithaka.
UG	Sanskrit	➤ Create an interest in literature. ➤ Availing the job opportunities in translation, transformation and Media. ➤ Developing the language. ➤ Increasing the critical attitude about literature studies. ➤ Understand the interrelation between literature and society. ➤ Understand the nature of language and literature. ➤ Enhance the interest in Sanskrit language. ➤ Information about phonetics. ➤ Develop various language skills.
UG	Urdu	By the end of the programme, the student will be able to ➤ Write sentences and essays on their own. ➤ Know about Urdu essayists, novelists, dramatists, and new and old poets and their poetry. ➤ Read, understand and enjoy Urdu poems. ➤ Gain knowledge about the authors, their lives and their contributions to Urdu literature. ➤ History of Urdu language and literature ➤ Understand what is 'Sinatein', their types and uses. ➤ Understand and appropriately use Urdu grammar.
UG	Sociology	➤ To understand the discipline of sociology and the sociological perspective. ➤ To enrich communication, ethical values, team work, professional and leadership skill sets of students. ➤ Apply the sociological imagination and sociological concepts and principles to her/his own life. ➤ To integrate knowledge, skill and attitude that will sustain an environment of learning and creativity among the students with an assurance for good careers.
PG	Sociology	➤ It helps the learners to be up to date on the modern changing situations.

		➤ The learners become good citizen and they contribute to the solution of community problems. ➤ Sociological knowledge is helpful for understanding and planning of society. It is a vehicle of social reform & social reorganization. ➤ The learners will be able to conduct studies regarding tribal societies and problems . It will help many governments in undertaking various social measures to promote the social welfare of the tribal people. ➤ The learners will be able to undertake research on various socio-economic, political and educational issues. Sociologists specially trained in research procedures are in increasing demand in business, government, industry, social welfare, advertising, administration and many other areas of community life.
UG	Political Science	➤ Political Science students will be able to write, read, speak and listen effectively in academic and social contexts. ➤ The fundamental rights, Directive Principles, duties of the individual in the Indian Constitution will be exercised by the students for the benefit of the people. ➤ Political Science students will analyze individual and group political behavior,the political process, public policy and administration; and case law within government. ➤ Political Science students will analyze the core intellectual traditions in political thought and apply their central tenets to contemporary political questions and issues. ➤ Students will analyze the behavior of state and non-state actors and the nature of their interactions. ➤ Students will compare and contrast the various political, social and economic systems that exist across the international community and analyze the political consequences of those variations. ➤ Students will use analytical skills to understand civic, social and environmental challenges. ➤ Students will demonstrate social responsibility and ethical reasoning within a variety of contexts.
UG	History	After completion the programme of B. A. in History students will be able to...... ➤ To develop the interest in the study of history and relating activity. ➤ Understand the history of India and modern World. ➤ Develop the ability to think critically and historically when discussing the past. ➤ Develop the ability to distinguish between fact and fiction. ➤ Explain what influence the past has on the present. ➤ Understand the importance of communal unity for country. ➤ Understand the background of our religion, custom and diversity of country. ➤ Critically recognize the Social, Political, Economic, religious and cultural aspects of History. ➤ Understand the difference between democracy and dictatorship. ➤ After B. A. in History students can get the opportunities for

		employment as a history Teacher. ➤ NGO and Social Welfare Organizations also employ History Graduates. ➤ Prepare for various types of competitive examinations. ➤ With an extensive Knowledge of history and Historical monuments, history graduates can work as a travel expert for tourist spot of historical importance.
UG	Home Economics	After completion the programme of B. A. in Home Economics students will be able to…… ➤ To create on awareness among the students about resources and their management in the family. ➤ To develop employability skills. The skill of 'earning, while learning. ➤ To understand the basic concept of Nutrition ➤ To develop abilities to plan diets for various diseases. ➤ To introduce the student to major concept of Human development. General care of baby
UG	Commerce	➤ To cater to the manpower needs of companies in Accounting, Taxation, Business Laws, Auditing, Financial analysis and Management. ➤ To enrich communication, ethical values, team work, professional and leadership skill sets of students. ➤ To inculcate entrepreneurship and managerial skills in students so as to enable them to establish and manage their business effectively ➤ To integrate knowledge, skill and attitude that will sustain an environment of learning and creativity among the students with an assurance for good careers.
UG	Chemistry	➤ The students will have fundamental and in depth knowledge about the Chemistry. ➤ The students can work as lab technician with precise handling and processing of chemicals. ➤ With this the students can also opt the job in chemical and pharmaceutical industry. ➤ The students can also explore their knowledge by opting higher education in the subject to make even more promising career.
PG	Chemistry	On completion of M.Sc. Chemistry programme, graduates will be able to: ➤ Apply advanced concepts of organic, analytical, physical and inorganic chemistry to solve complex problems to improve human life and Provide theoretical background and develop practical skills for analysing materials using modern analytical methods and instruments ➤ Design experiments, analyze, synthesize and interpret data to provide solutions to different industrial problems by working in the pure, inter and multi-disciplinary areas of chemical sciences. Also, inculcate a problem solving approach by coordinating the different branches of chemistry ➤ Able to independently carry out research / investigation to solve practical problems and write / present a substantial technical

		report/document. Becomes professionally skilled for higher studies in research institutions and to work in chemical industries
		➢ In-depth knowledge helps to qualify in competitive exams.
UG	Mathematics	On completion of B.Sc. Mathematics program, graduates will be able to: ➢ Demonstrate basic ideas, skills in algebra, geometry, trigonometry,calculus number theory and classical mechanics. ➢ Apply the underlying unifying structures of mathematics (i.e. sets, relations and functions, logical structure, sequence and series) and the relationships among them ➢ Applying mathematical methods to solve science problem in research and technical problems in industry. ➢ Analyze and apply mathematical problems and solutions in a variety of contexts related to science, technology, business and industry, astronomy and astrophysics and illustrate these solutions using symbolic, numeric, or graphical methods ➢ Investigate and solve maths multiple choice questions.
PG	Mathematics	On completion of M.Sc. Mathematics program, graduates will be able to: ➢ Understanding of the fundamental axioms in mathematics and capability of developing ideas based on them. ➢ Inculcate mathematical reasoning. ➢ To develop ones own learning capacity. ➢ Prepare and motivate students for research studies in mathematics and related fields. ➢ Develop abstract mathematical thinking. ➢ To learn complex mathematical ideas and arguments.
UG	Botany	➢ Identify and become familiar with the scope, methodology and application of modern botany and learn to appreciate with its ability to explain various aspects. ➢ Understand theoretical and practical concepts of instruments that are commonly used in practicals of botany. ➢ Design and carry out scientific experiments and record the results of such experiments. ➢ Understand safety use of instrument like autoclave, laminar air flow etc. and how they are applicable in the botanical study in various fields. ➢ It explains how botany is useful for social, economic and for environmental problems and issues facing our society regarding pollution, toxic food, energy, medicine and health etc.
PG	Botany	➢ To have knowledge about various plant groups from lower to higher. The students will have ability to identify and apply the core knowledge related to Botany ➢ Knows the concepts of physiology, cell and molecular biology, plant and environmental ecology and the basis of plant development. ➢ Students acquired knowledge through practical work in the fields as well as in laboratory. ➢ Project work helped for creating research attitude among the post

		graduate students. The ability to apply broadly accepted scientific methodologies in their research project. ➢ Students'Presentation of research work at national and international audiences through both peer-reviewed and popular publications, professional meetings and conference proceedings. ➢ Development of professional foundations through activities such as teaching, internships, fellowships, and preparation of grant applications. ➢ Students can express themselves critically and clearly in their area of specialization, demonstrates both breadth and depth of knowledge in their chosen area of specialization. They should make progress towards a leadership role in developing their research ideas.
UG	Zoology	The student graduating with the Degree B. Sc with Zoology Upon completion of the B. Sc Degree Programme the graduate will be able to: ➢ Inculcate analytical/critical/logical/innovative thinking skills in the fields of Animal Diversity and Evolution, Molecular Biology, Embryology, Environmental Biology, Human Genetics and Applied Zoology. ➢ Acquire distinct traits and ethics with high professionalism to gain a broader insight into the domain concerned for nation building. Acquire skills in some of the specialized areas of Zoology. ➢ Get acquainted with the recent advancements both in core and applied fields of Zoology for the higher studies and career opportunities. ➢ Adopt scientific temper and give a positive correlation to live with scientific values and to acquire skills in biological/ analytical/ culture techniques. ➢ Prepare them as flexible and versatile person in the work place, possess the capacity to embrace the emerging technologies, leadership and team work opportunities.
PG	Zoology	➢ PSO1.Preparation of the checklist and inventories are possible through the identification of the fauna in local areas. ➢ PSO2. Knowledge of the various vital reactions at molecular level which are going in the organisms ➢ PSO3. Knowledge of genetic aspects, genetic traits, diseases and their specific causes. ➢ PSO4. Survey and data analysis of the various kinds of disease in the locality through project work of the students. ➢ PSO5. Understand the various strategies and phenomena related to animal reproduction. ➢ PSO6. Conservation strategies and awareness about environmental threats to reduce and save energy through Wildlife Week Celebration. ➢ PSO7. Analysis of corporation water samples for the investigation of parasitic presence. ➢ PSO8. Investigation of bones for identification of the

		samples from different animals found at the poaching sites in forest.
UG	Physics	➢ Identifying and describing physical systems with their professional knowledge. ➢ Developing their scientific intuition, ability and techniques to tackle problems either theoretical or experimental in nature. ➢ Knowledge of general physics like sound, wave, friction, forces and laws of motion and use of mathematics. ➢ Information of electrical current, circuits, construction and their use. ➢ Learning about concepts of nuclear physics and nuclear energies and importance of their use for mankind. ➢ knowing about the light and its importance in life, its characteristics, properties and use in various instruments
PG	Physics	➢ 1. Understand the basic concepts of physics particularly concepts in classical mechanics, quantum mechanics, statistical mechanics, electrodynamics and electronics to appreciate how diverse phenomena observed in nature follow from a small set of fundamental laws. ➢ 2. Learn how to perform experiments in basic as well as advanced areas of Physics such as Nanomaterials, Condensed Matter Physics, Electronics and Photonics. ➢ 3. Develop Analytical and integrative problem-solving methodologies through research-based learning. ➢ 4. Pursue research careers, careers in academics, in industries in physical science and in allied fields.
UG	Electronics	➢ The students get complete insight of electronics as subject. ➢ Students learn different types of electrical circuit designs, processing and operation. ➢ Understand the modeling of different circuits as per requirement. ➢ Could find the position as free lancer or employee in electronic kit production or design industries.
UG	Computer Science	➢ Students understand the fundamentals of computers, basic algorithms, processing and programming. ➢ Learn how the hardware components work in coordination. ➢ Understand the basics of Information technology ➢ Learn about internet, web page, data processing and cloud computing. ➢ The students become able to work independent as hardware repair.
	B.Voc. Banking and Financial Services	➢ Skills in inculcating electronic transactions in conducting a businessactivity ➢ Skill in practical applicability of money markettransactions ➢ Knowledge in undertaking banking marketoperations ➢ Ability to analyze and solve business problems using statisticaltechniques
	B.Voc. Pharmacy Assistant	➢ Discuss the nature of social work profession, ideals virtues of social work and effectual way of working as individual within groups and families. ➢ Demonstrate ethical, professional and social demeanor social

		workers and engage in lifelong learning and personality development. ➢ Apply knowledge of social systems and human behavior to promote social change, problem solving in human relationships and the empowerment of people to enhance their well-being. ➢ Express knowledge of theory, legislation, policy, official inquiry reports and international conventions, to assessment and intervention planning in social work practice. ➢ Employ social entrepreneurship for sustained living, in changing society by engaging in action projects, research work, networking and Liasoning
UG	B.Voc. Healthcare	➢ Develop the ability to collect history, perform relevant clinical assessment and frame appropriate electrotherapeutic and exercise therapy management for the patients. ➢ Demonstrate clinical decision making ability and provide appropriate patient care. ➢ Able to counsel the patients, family,colleagues and students regarding all necessary aspects of physiotherapy treatment protocol. ➢ Promote health education and improved quality of life through socially accepted and ethical practice of the profession. ➢ Work effectively in various inter professional collaborative settings like hospitals, Rehabilitation Centers, Special Schools, Health and Fitness Centers, Geriatric Centers, Ergonomic Consultant in different Sectors, such as corporate, Private Consultation, Home Care Services, Industrial Sectors, Sports Injuries management.