



Christ Church College, Kanpur

UNDERGRADUATE PROGRAM OUTCOME AND COURSE OUTCOME

Program Name	Program Outcome (PO)	Course Name & Code	Course Outcome (CO)
Bachelors of Commerce (B. Com)	The career options for students pursuing B.Com. Programme is vast and candidates will always have interesting profiles to work at if they play to their strengths. While many B.Com. Graduates may choose the much tried and tested path of CA, CS, CMA and other related fields of study, one has ample opportunity to choose an out-of-the-box career option, as one in travel and hospitality, media and telecommunications depending on the path and degree one chooses.	Business Organisation (C010101T)	CO1- Ability to understand the concept of Business Organisation along with the basic laws and norms of Business Organisation. CO2- Ability to understand the terminologies associated with the field of Business Organisation along with their relevance. CO3- Ability to identify the appropriate types and functioning of Business Organisation for solving different problems. CO4- Ability to apply basic Business Organisation principles to solve business and industry related problems.

			CO5- Ability to understand the concept of Sole Proprietorship, Partnership and Joint Stock Company etc.
		Business Statistics (C010102T)	The purpose of this paper is to inculcate and analytical ability among the students.
		Business Communication (C010103T)	To acquire skills in reading, writing, comprehension and communication, and also to use electronic media for business communication.
		Introduction to Computer Applications (C010104T)	The objective of this course is to provide basic knowledge of computer, DBMS, data base language and word processing.
		Business Management (C010201T)	CO1- Ability to understand the concept of Business Management along with the basic laws and norms of Business Management. CO2- Ability to understand the terminologies associated with the field of Business Management and control along with their relevance. CO3- Ability to identify the appropriate method and techniques of Business Management for solving different problems. CO4- Ability to apply basic Business Management principles to solve business and industry related problems. CO5- Ability to understand the concept of Planning, Organising, Direction, Motivation and Control etc.
		Financial Accounting (C010202T)	The objective of this paper is to help students to acquire conceptual knowledge of fundamentals of accounting and to impart skills for recording various kinds of business transactions.

		Computerized Accounting [Practical] (C010203P)	The purpose of this paper is to provide knowledge of accounting with computer.
		Essentials of E-commerce (C010204T)	This course is to familiarize the student with the basics of ecommerce and to comprehend its potential.
		Business Economics (C010205T)	Business Economics objective this course is meant to acquaint the students with the principles of Business Economics as are applicable business.
		Company Law (C010301T)	The objective of this course is to provide basic knowledge of the provisions of the Companies Act 2013 along with relevant cases.
		Cost Accounting (C010302T)	This course exposes the students to the basic concepts and the tools used in cost accounting.
		Business Regulatory Framework (C010303T)	The objective of this course is to provide a brief idea about the framework of Indian Contract Act,1872 and Sale of Goods Act,1930.
		Inventory Management (C010304T)	<p>CO1- Ability to understand the concept of Inventory Management along with the basic laws and axioms of Inventory Management.</p> <p>CO2- Ability to understand the terminologies associated with the field of Inventory management and control along with their relevance.</p> <p>CO3- Ability to identify the appropriate method and techniques of Inventory management for solving different problems.</p> <p>CO4- Ability to apply basic Inventory management</p>

			<p>principles to solve business and industry related problems.</p> <p>CO5- Ability to understand the concept of Working Capital Management, Demand Analysis and Obsolescence.</p>
		Income Tax Law and Accounts (C010401T)	It enables the students to know the basics of Income Tax Act and its implications.
		Fundamentals of Marketing (C010402T)	The objective of this course is to provide basic knowledge concepts, principles, tools and techniques of marketing.
		Digital Marketing [Practical] (C010403P)	<p>CO1- Ability to understand the concept of Digital Marketing along with the basic forms and norms of Digital Marketing.</p> <p>CO2- Ability to understand the terminologies associated with the field of Digital Marketing and control along with their relevance.</p> <p>CO3- Ability to identify the appropriate method and techniques of Digital Marketing for solving different problems.</p> <p>CO4- Ability to apply basic Digital Marketing principles to solve business and industry related issues and problems.</p> <p>CO5- Ability to understand the concept of Budgetary Control, Cash Flow Statement, Fund Flow Statement, Break Even Analysis etc.</p>
		Fundamentals of Entrepreneurship (C010404T)	<p>CO1- Ability to understand the concept of Entrepreneurship along with the basic laws and practices of Entrepreneurship.</p> <p>CO2- Ability to understand the terminologies associated with the field of Entrepreneurship along with their relevance.</p>

			<p>CO3- Ability to identify the appropriate functions and qualities of Entrepreneur for solving different problems.</p> <p>CO4- Ability to apply basic Entrepreneurship principles to solve business and industry related problems.</p> <p>CO5- Ability to understand the concept of Life Small Business, Raising of Funds and EDP.</p>
		Tourism and Travel Management (C010405T)	The objective of this course is to understand the fundamental concept of Tourism and to familiarize with the significance and emerging trends in tourism.
		Corporate Accounting (C010501T)	This course enables the student to develop awareness about corporate accounting in conformity with the provisions of company act.
		Goods and Services Tax (C010502T)	To provide students with the working knowledge of principles and provisions of GST to understand the relevance of GST in the present Indian tax in scenario and its contribution for economic development.
		Business Finance (C010503T)	This course is to help students understand the conceptual framework of Business Finance.
		Principles and Practices of Insurance (C010504T)	<p>CO1- Ability to understand the concept of Insurance along with the basic laws and practices of Insurance.</p> <p>CO2- Ability to understand the terminologies associated with the field of Insurance and control along with their relevance.</p> <p>CO3- Ability to identify the appropriate method and types of Insurance for solving different problems.</p> <p>CO4- Ability to apply basic Insurance principles to solve business and industry related problems.</p> <p>CO5- Ability to understand the concept of Life, Marine and Fire Insurance.</p>

		<p>Monetary Theory and Banking in India (C010505T)</p>	<p>The course exposes the students to the working for money and financial system prevailing in India.</p>
		<p>Accounting for Managers (C010601T)</p>	<p>CO1- Ability to understand the concept of Managerial Accounting along with the basic forms and norms of Managerial Accounting. CO2- Ability to understand the terminologies associated with the field of Managerial Accounting and control along with their relevance. CO3- Ability to identify the appropriate method and techniques of Managerial Accounting for solving different problems. CO4- Ability to apply basic Managerial Accounting principles to solve business and industry related issues and problems. CO5- Ability to understand the concept of Budgetary Control, Cash Flow Statement, Fund Flow Statement, Break Even Analysis etc.</p>
		<p>Auditing (C010602T)</p>	<p>This course aims at imparting knowledge about the principles and methods of auditing and their application.</p>
		<p>Financial Market Operations (C010604T)</p>	<p>CO1- Ability to understand the concept of Financial Market along with the basic forms and norms of Financial Market. CO2- Ability to understand the terminologies associated with the field of Financial Market and control along with their relevance. CO3- Ability to identify the appropriate method and techniques of Financial Market for solving different problems.</p>

			<p>CO4- Ability to apply basic Financial Market principles to solve business and industry related problems.</p> <p>CO5- Ability to understand the concept of Primary and Secondary Market, Stock Exchange, SEBI etc.</p>
		Human Resource Management (C010605T)	The paper aims to develop in the students a proper understanding about human resource management.
		Business Ethics and Corporate Governance (C010606T)	This course seeks to provide knowledge about the concepts, tools, techniques, and relevance of Business Ethics and Corporate Governance in the present changing scenario.
Bachelors of Science (Physics)	<p>The practical value of science for productivity, for raising the standard of living of the people is surely recognized. Science as a power, which provides tools for effective action for the benefit of mankind or for conquering the forces of Nature or for developing resources, is surely highlighted everywhere. Besides the utilitarian aspect, the value of science, lies in the fun called intellectual enjoyment. Science teaches the value of rational thought as well as importance of freedom of thought.</p> <p>Our teaching so far has been aimed more at formal knowledge and understanding instead of training and application oriented. Presently, the emphasis is more on training, application and to some extent on appreciation, the fostering in the pupils of independent thinking and creativity. Surely, teaching has to be more objective based. The process of application-based training, whether we call it a thrill or ability, is to be emphasized as much as the content.</p> <p>Physics is a basic science; it attempts to explain the natural phenomenon in as simple a manner as possible. It</p>	Mathematical Physics & Newtonian Mechanics (B010101T)	<p>CO1- Recognize the difference between scalars, vectors, pseudo-scalars and pseudo-vectors.</p> <p>CO2- Understand the physical interpretation of gradient, divergence and curl.</p> <p>CO3- Comprehend the difference and connection between Cartesian, spherical and cylindrical coordinate systems.</p> <p>CO4- Know the meaning of 4-vectors, Kronecker delta and Epsilon (Levi Civita) tensors.</p> <p>CO5- Study the origin of pseudo forces in rotating frame.</p> <p>CO6- Study the response of the classical systems to external forces and their elastic deformation.</p> <p>CO7- Understand the dynamics of planetary motion and the working of Global Positioning System (GPS).</p> <p>CO8- Comprehend the different features of Simple Harmonic Motion (SHM) and wave propagation.</p>
		Mechanical Properties of Matter (B010102P)	Experimental physics has the most striking impact on the industry wherever the instruments are used to study and determine the mechanical properties.

<p>is an intellectual activity aimed at interpreting the Multiverse. The starting point of all physics lies in experience. Experiment, whether done outside or in the laboratory, is an important ingredient of learning physics and hence the present programme integrates six experimental physics papers focusing on various aspects of modern technology based equipments. With all the limitations imposed (even the list of experiments as given in the syllabus) if the spirit of discovery by investigation is kept in mind, much of the thrill can be experienced.</p> <p>PO1- The main aim of this programme is to help cultivate the love for Nature and its manifestations, to transmit the methods of science (the contents are only the means) to observe things around, to generalize, to do intelligent guessing, to formulate a theory & model, and at the same time, to hold an element of doubt and thereby to hope to modify it in terms of future experience and thus to practice a pragmatic outlook.</p> <p>PO2- The programme intends to nurture the proficiency in functional areas of Physics, which is in line with the international standards, aimed at realizing the goals towards skilled India.</p> <p>PO3- Keeping the application-oriented training in mind; this programme aims to give students the competence in the methods and techniques of theoretical, experimental and computational aspects of Physics so as to achieve an overall understanding of the subject for holistic development. This will cultivate in specific application-oriented training leading to their goals of employment.</p> <p>PO4- The Bachelor's Project (Industrial Training / Survey / Dissertation) is intended to give an essence of</p>		Measurement precision and perfection is achieved through Lab Experiments. Online Virtual Lab Experiments give an insight in simulation techniques and provide a basis for modelling.
	Thermal Physics & Semiconductor Devices (B010201T)	<p>CO1- Recognize the difference between reversible and irreversible processes.</p> <p>CO2- Understand the physical significance of thermodynamical potentials.</p> <p>CO3- Comprehend the kinetic model of gases w.r.t. various gas laws.</p> <p>CO4- Study the implementations and limitations of fundamental radiation laws.</p> <p>CO5- Utility of AC bridges.</p> <p>CO6- Recognize the basic components of electronic devices.</p> <p>CO7- Design simple electronic circuits.</p> <p>CO8- Understand the applications of various electronic instruments.</p>
	Thermal Properties of Matter & Electronic Circuits (B010202P)	Experimental physics has the most striking impact on the industry wherever the instruments are used to study and determine the thermal and electronic properties. Measurement precision and perfection is achieved through Lab Experiments. Online Virtual Lab Experiments give an insight in simulation techniques and provide a basis for modelling.
	Electromagnetic Theory & Modern Optics (B010301T)	<p>CO1- Better understanding of electrical and magnetic phenomenon in daily life.</p> <p>CO2- To troubleshoot simple problems related to electrical devices.</p> <p>CO3- Comprehend the powerful applications of ballistic galvanometer.</p>

	<p>research work for excellence in explicit areas. It integrates with specific job requirements / opportunities and provides a foundation for Bachelor (Research) Programmes.</p>		<p>CO4- Study the fundamental physics behind reflection and refraction of light (electromagnetic waves). CO5- Study the working and applications of Michelson and Fabry-Perot interferometers. CO6- Recognize the difference between Fresnel's and Fraunhofer's class of diffraction. CO7- Comprehend the use of polarimeters. CO8- Study the characteristics and uses of lasers</p>
		<p>Demonstrative Aspects of Electricity & Magnetism (B010302P)</p>	<p>Experimental physics has the most striking impact on the industry wherever the instruments are used to study and determine the electric and magnetic properties. Measurement precision and perfection is achieved through Lab Experiments. Online Virtual Lab Experiments give an insight in simulation techniques and provide a basis for modelling.</p>
		<p>Perspectives of Modern Physics & Basic Electronics (B010401T)</p>	<p>CO1- Recognize the difference between the structure of space & time in Newtonian & Relativistic mechanics. CO2- Understand the physical significance of consequences of Lorentz transformation equations. CO3- Comprehend the wave-particle duality. CO4- Develop an understanding of the foundational aspects of Quantum Mechanics. CO5- Study the comparison between various biasing techniques. CO6- Study the classification of amplifiers. CO7- Comprehend the use of feedback and oscillators. CO8- Comprehend the theory and working of optical fibres along with its applications.</p>

		<p>Basic Electronics Instrumentation (B010402P)</p>	<p>Basic Electronics instrumentation has the most striking impact on the industry wherever the components / instruments are used to study and determine the electronic properties. Measurement precision and perfection is achieved through Lab Experiments. Online Virtual Lab Experiments give an insight in simulation techniques and provide a basis for modelling.</p>
		<p>Classical & Statistical Mechanics (B010501T)</p>	<p>CO1- Understand the concepts of generalized coordinates and D'Alembert's principle. CO2- Understand the Lagrangian dynamics and the importance of cyclic coordinates. CO3- Comprehend the difference between Lagrangian and Hamiltonian dynamics. CO4- Study the important features of central force and its application in Kepler's problem. CO5- Recognize the difference between macrostate and microstate. CO6- Comprehend the concept of ensembles. CO7- Understand the classical and quantum statistical distribution laws. CO8- Study the applications of statistical distribution laws.</p>
		<p>Quantum Mechanics & Spectroscopy (B010502T)</p>	<p>CO1- Understand the significance of operator formalism in Quantum mechanics. CO2- Study the eigen and expectation value methods. CO3- Understand the basis and interpretation of Uncertainty principle. CO4- Develop the technique of solving Schrodinger equation for 1D and 3D problems. CO5- Comprehend the success of Vector atomic model in the theory of atomic spectra.</p>

			<p>CO6- Study the different aspects of spectra of Group I & II elements.</p> <p>CO7- Study the production and applications of X-rays.</p> <p>CO8- Develop an understanding of the fundamental aspects of Molecular spectra.</p>
		Demonstrative Aspects of Optics & Lasers (B010503P)	<p>Experimental physics has the most striking impact on the industry wherever the instruments are used to study and determine the optical properties. Measurement precision and perfection is achieved through Lab Experiments. Online Virtual Lab Experiments give an insight in simulation techniques and provide a basis for modelling.</p>
		Solid State & Nuclear Physics (B010601T)	<p>CO1- Understand the crystal geometry w.r.t. symmetry operations.</p> <p>CO2- Comprehend the power of X-ray diffraction and the concept of reciprocal lattice.</p> <p>CO3- Study various properties based on crystal bindings.</p> <p>CO4- Recognize the importance of Free Electron & Band theories in understanding the crystal properties.</p> <p>CO5- Study the salient features of nuclear forces & radioactive decays.</p> <p>CO6- Understand the importance of nuclear models & nuclear reactions.</p> <p>CO7- Comprehend the working and applications of nuclear accelerators and detectors.</p> <p>CO8- Understand the classification and properties of basic building blocks of nature.</p>
		Analog & Digital Principles & Applications (B010602T)	<p>CO1- Study the drift and diffusion of charge carriers in a semiconductor.</p> <p>CO2- Understand the Two-Port model of a transistor.</p>

			<p>CO3- Study the working, properties and uses of FETs. CO4- Comprehend the design and operations of SCRs and UJTs. CO5- Understand various number systems and binary codes. CO6- Familiarize with binary arithmetic. CO7- Study the working and properties of various logic gates. CO8- Comprehend the design of combinational and sequential circuits</p>
		<p>Analog & Digital Circuits (B010603P)</p>	<p>Analog & digital circuits have the most striking impact on the industry wherever the electronics instruments are used to study and determine the electronic properties. Measurement precision and perfection is achieved through Lab Experiments. Online Virtual Lab Experiments give an insight in simulation techniques and provide a basis for modelling</p>
<p>Bachelors of Science (Chemistry)</p>	<p>PO1- Students will have a firm foundation in the fundamentals and application of current chemical and scientific theories including those in analytical, Inorganic, Organic and Physical Chemistries. PO2- Students will be able to design and carry out scientific experiments as well as accurately record and analyse the results of such experiments. PO3- Students will be skilled in problem solving, critical thinking and analytical reasoning as applied to scientific problems. PO4- Students will be able to explore new areas of research in both chemistry and allied fields of science and technology.</p>	<p>Fundamentals of Chemistry (B020101T)</p>	<p>CO1- Students will gain an understanding of Molecular geometries, physical and chemical properties of the molecules. CO2- Current bonding models for simple inorganic and organic molecules in order to predict structures and important bonding parameters. CO3- The chapter Recapitulation of basics of organic chemistry gives the most primary and utmost important knowledge and concepts of organic Chemistry. CO4- This course gives a broader theoretical picture in multiple stages in an overall chemical reaction. It describes reactive intermediates, transition states and states of all the bonds broken and formed. It enables to</p>

<p>PO5- Students will appreciate the central role of chemistry in our society and use this as a basis for ethical behaviour in issues facing chemists including an understanding of safe handling of chemicals, environmental issues and key issues facing our society in energy, health and medicine.</p> <p>PO6- Students will be able to explain why chemistry is an integral activity for addressing social, economic, and environmental problems.</p> <p>PO7- Students will be able to function as a member of an interdisciplinary problem-solving team.</p>		<p>understand the reactants, catalyst, stereochemistry and major and minor products of any organic reaction.</p> <p>CO5- It describes the types of reactions and the Kinetic and thermodynamic aspects one should know for carrying out any reaction and the ways how the reaction mechanism can be determined.</p> <p>CO6- The chapters Stereochemistry gives the clear picture of two-dimensional and three-dimensional structure of the molecules, and their role in reaction mechanism</p>
	<p>Quantitative Analysis (B020102P)</p>	<p>Upon completion of this course the students will have the knowledge and skills to- understand the laboratory methods and tests related to estimation of metals ions and estimation of acids and alkali contents in commercial products.</p> <p>CO1- Potability tests of water samples.</p> <p>CO2- Estimation of metal ions in samples</p> <p>CO3- Estimation of alkali and acid contents in samples</p> <p>CO4- Estimation of inorganic salts and hydrated water in samples</p>
	<p>Bioorganic and Medicinal Chemistry (B020201T)</p>	<p>Biomolecules are important for the functioning of living organisms. These molecules perform or trigger important biochemical reactions in living organisms. When studying biomolecules, one can understand the physiological function that regulates the proper growth and development of a human body. This course aims to introduce the students with basic experimental understanding of carbohydrates, amino acids, proteins, nucleic acids and medicinal chemistry. Upon completion of this course students may get job</p>

			opportunities in food, beverage and pharmaceutical industries.
		Biochemical Analysis (B020202P)	This course will provide basic qualitative and quantitative experimental knowledge of biomolecules such as carbohydrates, proteins, amino acids, nucleic acids drug molecules. Upon successful completion of this course students may get job opportunities in food, beverage and pharmaceutical industries.
		Chemical Dynamics & Coordination Chemistry (B020301T)	Upon successful completion of this course students should be able to describe the characteristic of the three states of matter and describe the different physical properties of each state of matter. kinetic theory of gases, laws of crystallography, liquid state and liquid crystals, conductometric, potentiometric, optical methods, polarimetry and spectrophotometer technique to study Chemical kinetics and chemical equilibrium. After the completion of the course, Students will be able to understand. metal- ligand bonding in transition metal complexes, thermodynamic and kinetic aspects of metal complexes.
		Physical Analysis (B020302P)	Upon successful completion of this course students should be able to calibrate apparatus and prepare solutions of various concentrations, estimation of components through volumetric analysis; to perform dilatometric experiments- one and two component phase equilibrium experiments.
		Quantum Mechanics and Analytical Techniques (BO20401T)	Upon successful completion of this course students should be able to describe atomic structure, elementary quantum mechanics, wave function and its significance; Schrodinger wave equation and its

			<p>applications; Molecular orbital theory, basic ideas – Criteria for forming molecular orbital from atomic orbitals, Molecular Spectroscopy, Rotational Spectrum, vibrational Electronic Spectrum- photo chemistry and kinetics of photo chemical reaction.</p> <p>Analytical chemistry plays an enormous role in our society, such as in drug manufacturing, process control in industry, environmental monitoring, medical diagnostics, food production, and forensic surveys. It is also of great importance in different research areas. Analytical chemistry is a science that is directed towards creating new knowledge so that chemical analysis can be improved to respond to increasing or new demands.</p> <p>CO1- Students will be able to explore new areas of research in both chemistry and allied fields of science and technology.</p> <p>CO2- Students will be able to function as a member of an interdisciplinary problem-solving team.</p> <p>CO3- Students will be skilled in problem solving, critical thinking and analytical reasoning as applied to scientific problems</p> <p>CO4- Students will gain an understanding of how to determine the structure of organic molecules using IR and NMR spectroscopic techniques</p> <p>CO5- To develop basic skills required for purification, solvent extraction, TLC and column chromatography</p>
		<p>Instrumental Analysis (B020402P)</p>	<p>Upon completion of this course, chemistry majors are able to employ critical thinking and scientific inquiry in the performance, design, interpretation and documentation of laboratory experiments, at a level</p>

			<p>suitable to succeed at an entry-level position in chemical industry or a chemistry graduate program.</p> <p>CO1- Students will be able to explore new areas of research in both chemistry and allied fields of science and technology.</p> <p>CO2- Students will be able to function as a member of an interdisciplinary problem-solving team.</p> <p>CO3- Students will be skilled in problem solving, critical thinking and analytical reasoning as applied to scientific problems</p> <p>CO4- Students will gain an understanding of how to determine the structure of organic molecules using IR and NMR spectroscopic techniques</p> <p>CO5- To develop basic skills required for purification, solvent extraction, TLC and column chromatography</p>
		<p>Organic Synthesis A (B020501T)</p>	<p>Hydrocarbons are the principal constituents of petroleum and natural gas. They serve as fuels and lubricants as well as raw materials for the production of plastics, fibres, rubbers, solvents and industrial chemicals. This course will provide a broad foundation in for the synthesis of hydrocarbons. Hydroxy and carbonyl compounds are industrially important compounds The industries of plastics, fibres, petroleum and rubbers will specially recognize this course. Students will gain an understanding of which are used as solvents and raw material for synthesis of drug and other pharmaceutically important compounds.</p> <p>CO1- Synthesis and chemical properties of aliphatic and aromatic hydrocarbons</p>

			<p>CO2- Synthesis and chemical properties of alcohols, halides carbonyl compounds, carboxylic acids and esters</p> <p>CO3- How to design and synthesize aliphatic and aromatic hydrocarbons.</p> <p>CO4- How to convert aliphatic and aromatic hydrocarbons to other industrially important compounds</p> <p>CO5- Functional group interconversion.</p>
		<p>Rearrangements and Chemistry of Group Elements (B020502T)</p>	<p>This paper provides detailed knowledge of synthesis of various class of organic compounds and functional groups inter conversion. Organic synthesis is the most important branch of organic chemistry which provides jobs in production & QC departments related to chemicals, drugs, medicines, FMCG etc. industries.</p> <p>CO1- It relates and gives an analytical aptitude for synthesizing various industrially important compounds.</p> <p>CO2- This paper also provides a detailed knowledge on the elements present in our surroundings, their occurrence in nature. Their position in periodic table, their physical and chemical properties as well as their extraction. This paper also gives detailed understanding of the s, p, d and f block elements and their characteristics.</p>
		<p>Qualitative Analysis (B020503P)</p>	<p>Upon completion of this course the students will have the knowledge and skills to- understand the laboratory methods and tests related to inorganic mixtures and organic compounds.</p> <p>CO1- Identification of acidic and basic radicals in inorganic mixtures</p> <p>CO2- Separation of organic compounds from mixture</p>

			<p>CO3- Elemental analysis in organic compounds</p> <p>CO4- Identification of functional group in organic compounds</p> <p>CO5- Identification of organic compound</p>
		<p>Organic Synthesis B (B020601T)</p>	<p>This paper provides detailed knowledge of synthesis of various class of organic compounds and functional groups inter conversion. Organic synthesis is the most important branch of organic chemistry which provides jobs in production & QC departments related to chemicals, drugs, medicines, FMCG etc. industries. The study of natural products and heterocyclic compounds offers an excellent strategy toward identifying novel biological probes for a number of diseases. Historically, natural products have played an important role in the development of pharmaceutical drugs for a number of diseases including cancer and infection.</p> <p>CO1- It relates and gives an analytical aptitude for synthesizing various industrially important compounds.</p> <p>CO2- Learn the different types of alkaloids, & terpenes etc and their chemistry and medicinal importance.</p> <p>CO3- Explain the importance of natural compounds as lead molecules for new drug discovery.</p>
		<p>Chemical Energetics and Radio Chemistry (B020602T)</p>	<p>Upon successful completion of this course students should be able to describe laws of thermodynamics and its applications, phase equilibria of one and two component system, electro chemistry, ionic equilibrium applications of conductivity and potentiometric measurements.</p>

		Analytical Methods (B020603P)	Upon successful completion of this course students should be able to quantify the product obtained through gravimetric method; determination of R _f values and identification of organic compounds through paper and thin layer chromatography laboratory techniques- perform thermos chemical reactions.
Bachelors of Science (Zoology)	<p>PO1- The programme has been designed in such a way so that the students get the flavour of both classical and modern aspects of Zoology/Animal Sciences. It aims to enable the students to study animal diversity in Indian subcontinent, environmental science and behavioural ecology.</p> <p>PO2- The modern areas including cell biology and genetics, molecular biology, biochemistry, physiology followed by biostatistics, Evolutionary biology, bioinformatics and genetic engineering have been included to make the study of animals more interesting and relevant to human studies which is the requirement in recent times.</p> <p>PO3- The lab courses have been designed in such a way that students will be trained to join public or private labs.</p>	Cytology, Genetics and Infectious Diseases (B050101T)	<p>CO1- Understand the structure and function of all the cell organelles.</p> <p>CO2- Know about the chromatin structure and its location.</p> <p>CO3- To be familiar with the basic principle of life, how a cell divides leading to the growth of an organism and also reproduces to form new organisms.</p> <p>CO4- How one cell communicates with its neighbouring cells?</p> <p>CO5- Understand the basic principles of genetics and how genes (earlier called factors) are inherited from one generation to another.</p> <p>CO6- Understand the Mendel's laws and the deviations from conventional patterns of inheritance.</p> <p>CO7- Comprehend how environment plays an important role by interacting with genetic factors.</p> <p>CO8- How to detect chromosomal aberrations in humans and study the pattern of inheritance by pedigree analysis in families.</p>
		Cell Biology & Cytogenetics Lab (B050102P)	<p>CO1- To use simple and compound microscopes.</p> <p>CO2- To prepare slides and stain them to see the cell organelles.</p> <p>CO3- To be familiar with the basic principle of life, how a cell divides leading to the growth of an organism and also reproduces to form new organisms.</p>

			<p>CO4- The chromosomal aberrations by preparing karyotypes.</p> <p>CO5- How chromosomal aberrations are inherited in humans by pedigree analysis in families.</p> <p>CO6- The antigen-antibody reaction</p>
		Biochemistry and Physiology (B050201T)	<p>CO1- To develop a deep understanding of structure of biomolecules like proteins, lipids and carbohydrates</p> <p>CO2- How simple molecules together form complex macromolecules.</p> <p>CO3- To understand the thermodynamics of enzyme catalysed reactions.</p> <p>CO4- Mechanisms of energy production at cellular and molecular levels.</p> <p>CO5- To understand systems biology and various functional components of an organism.</p> <p>CO6- To explore the complex network of these functional components.</p> <p>CO7- To comprehend the regulatory mechanisms for maintenance of function in the body.</p>
		Physiological, Biochemical & Hematology Lab (B050202P/R)	<p>CO1- Understand the structure of biomolecules like proteins, lipids and carbohydrates</p> <p>CO2- Perform basic hematological laboratory testing.</p> <p>CO3- Distinguish normal and abnormal hematological laboratory findings to predict the diagnosis of hematological disorders and diseases.</p>
		Molecular Biology, Bioinstrumentation & Biotechniques (B050301T)	<p>CO1- A detailed and conceptual understanding of molecular processes viz. DNA to trait.</p> <p>CO2- A clear understanding of the processes of central dogma viz. transcription, translation etc. underlying survival and propagation of life at molecular level.</p>

			<p>CO3- Understanding of how genes are ultimately expressed as proteins which are responsible for the structure and function of all organisms.</p> <p>CO4- Learn how four sequences (3 letter codons) generate the transcripts of life and determine the phenotypes of organisms.</p> <p>CO5- How genes are regulated differently at different time and place in prokaryotes and eukaryotes.</p>
		<p>Bioinstrumentation & Molecular Biology Lab (B050302P)</p>	<p>CO1- Understand the basic principles of microscopy, working of different types of microscopes</p> <p>CO2- Understand the basic techniques of centrifugation and chromatography for studying cells and separation of biomolecules</p> <p>CO3- Understand the principle of measuring the concentrations of macromolecules in solutions by colorimeter and spectrophotometer and use them in Biochemistry.</p> <p>CO4- Learn about some of the commonly used advance DNA testing methods.</p>
		<p>Gene Technology, Immunology and Computational Biology (B050401T)</p>	<p>CO1- Understand the principles of genetic engineering, how genes can be cloned in bacteria and the various technologies involved in it.</p> <p>CO2- Know the applications of biotechnology in various fields like agriculture, industry and human health.</p> <p>CO3- To have an in depth understanding about Immune System & its mechanisms.</p> <p>CO4- Get introduced to DNA testing and utility of genetic engineering in forensic sciences.</p> <p>CO5- Get introduced to computers and use of bioinformatics tools.</p>

			<p>CO6- Enable students to get employment in pathology/Hospital.</p> <p>CO7- Take up research in biological sciences.</p>
		<p>Genetic Engineering and Counselling Lab (B050402P/R)</p>	<p>CO1- Understand the principles of genetic engineering with hands-on experiments in mutation detection, testing of infectious diseases like Covid19.</p> <p>CO2- Get introduced to DNA testing and utility of genetic engineering in forensic sciences.</p> <p>CO3- Apply knowledge and awareness of the basic principles and concepts of biology, computer science and mathematics existing software effectively to extract information from large databases and to use this information in computer modelling.</p> <p>CO4- Use bioinformatics tools to find out evolutionary/phylogenetic relationship of organisms using gene sequences.</p> <p>CO5- Get employment in Hospitals/Diagnostic and forensic labs/Counsel families with genetic disorders.</p> <p>CO6- Enable students to take up research in biological sciences.</p>
		<p>Diversity of Non- Chordates and Economic Zoology (B050501T)</p>	<p>CO1- Demonstrate comprehensive identification abilities of non-chordate diversity</p> <p>CO2- Explain structural and functional diversity of non-chordate</p> <p>CO3- Explain evolutionary relationship amongst non-chordate groups</p> <p>CO4- Get employment in different applied sectors</p> <p>CO5- Students can start their own business i.e., self-employments.</p> <p>CO6- Enable students to take up research in Biological Science</p>

		<p>Diversity of Chordates and Comparative Anatomy (B050502T)</p>	<p>CO1- Demonstrate comprehensive identification abilities of chordate diversity CO2- Explain structural and functional diversity of chordates CO3- Explain evolutionary relationship amongst chordates CO4- Take up research in biological sciences.</p>
		<p>Lab on Virtual Dissection, Anatomy, Economic Zoology and Parasitology (B050503P)</p>	<p>CO1- Demonstrate comprehensive identification abilities of chordate and non- chordates diversity CO2- Explain structural and functional diversity of chordates and non-chordates CO3- Explain evolutionary relationship amongst chordates and non-chordates CO4- Generate self employment CO5- Enable students to take up research in biological sciences.</p>
		<p>Evolutionary and Developmental Biology (B050601T)</p>	<p>CO1- Understand that by biological evolution we mean that many of the organisms that inhabit the earth today are different from those that inhabited it in the past. CO2- Understand that natural selection is one of several processes that can bring about evolution, although it can also promote stability rather than change. CO3- Understand how the single cell formed at fertilisation forms an embryo and then a full adult organism. CO4- Integrate genetics, molecular biology, biochemistry, cell biology, anatomy and physiology during embryonic development.</p>

			<p>CO5- Understand a variety of interacting processes, which generate an organism's heterogeneous shapes, size, and structural features.</p> <p>CO6- Understand how a cell behaves in response to an autonomous determinant or an external signal, and the scientific reasoning exhibited in experimental life science.</p>
		<p>Ecology, Ethology, Environmental Science and Wildlife (B050602T)</p>	<p>CO1- Complexities and interconnectedness of various environmental levels and their functioning.</p> <p>CO2- Global environmental issues, their causes, consequences and amelioration.</p> <p>CO3- To understand and identify behaviours in a variety of taxa.</p> <p>CO4- The proximate and ultimate causes of various behaviours.</p> <p>CO5- About the molecules, cells, and systems of biological timing systems.</p> <p>CO6- Conceptualizing how species profitably inhabit in the temporal environment and space out their activities at different times of the day and seasons.</p> <p>CO7- To interpret the cause and effect of life style disorders contributing to public understanding of biological timing.</p> <p>CO8- To understand the importance of wildlife conservation.</p>
		<p>Lab on Ecology, Environmental Science, Behavioural Ecology & Wildlife (B050603P)</p>	<p>CO1- To understand the basic concepts, importance, status and interaction between organisms and environment.</p> <p>CO2- Get employment in forest services, sanctuaries, conservatories etc.</p> <p>CO3- Enable students to take up research in wildlife.</p>

<p>Bachelors of Science (Botany)</p>	<p>Transformed curriculum shall develop educated outcome-oriented candidature, fostered with discovery-learning, equipped with practice & skills to deal practical problems and versed with recent pedagogical trends in education including e-learning, flipped class and hybrid learning to develop into responsible citizen for nation-building and transforming the country towards the future with their knowledge gained in the field of plant science.</p> <p>PO1- CBCS syllabus with a combination of general and specialized education shall introduce the concepts of breadth and depth in learning</p> <p>PO2- Shall produce competent plant biologists who can employ and implement their gained knowledge in basic and applied aspects that will profoundly influence the prevailing paradigm of agriculture, industry, healthcare and environment to provide sustainable development.</p> <p>PO3- Will increase the ability of critical thinking, development of scientific attitude, handling of problems and generating solutions, improve practical skills, enhance communication skill, social interaction, increase awareness in judicious use of plant resources by recognizing the ethical value system.</p> <p>PO4- The training provided to the students will make them competent enough for doing jobs in Govt. and private sectors of academia, research and industry along with graduate preparation for national as well as international competitive examinations, especially UGC-CSIR NET, UPSC Civil Services Examination, IFS, NSC, FCI, BSI, FRI etc.</p> <p>PO5- Certificate and diploma courses are framed to generate self- entrepreneurship and self- employability, if multi exit option is opted.</p>	<p>Microbiology & Plant Pathology (B040101T)</p>	<p>After the completion of the course the students will be able to-</p> <p>CO1- Develop understanding about the classification and diversity of different microbes including viruses, Algae, Fungi & Lichens & their economic importance.</p> <p>CO2- Develop conceptual skill about identifying microbes, pathogens, biofertilizers & lichens.</p> <p>CO3- Gain knowledge about developing commercial enterprise of microbial products.</p> <p>CO4- Learn host-pathogen relationship and disease management.</p> <p>CO5- Learn Presentation skills (oral & writing) in life sciences by usage of computer & multimedia.</p> <p>CO6- Gain Knowledge about uses of microbes in various fields.</p> <p>CO7- Understand the structure and reproduction of certain selected bacteria algae, fungi and lichens</p> <p>CO8- Gain Knowledge about the economic values of this lower group of plant community.</p>
	<p>Techniques in Microbiology & Plant Pathology (B040102P)</p>	<p>After the completion of the course the students will be able-</p> <p>CO1- Understand the instruments, techniques, lab etiquettes and good lab practices for working in a microbiology laboratory.</p> <p>CO2- Develop skills for identifying microbes and using them for Industrial, Agriculture and Environment purposes.</p> <p>CO3- Practical skills in the field and laboratory experiments in Microbiology & Pathology.</p> <p>CO4- Learn to identify Algae, Lichens and plant pathogens along with their Symbiotic and Parasitic associations.</p>	

	<p>PO6- Lifelong learning be achieved by drawing attention to the vast world of knowledge of plants and their domestication.</p>		<p>CO5- Can initiate his own Plant & Seed Diagnostic Clinic CO6- Can start own enterprise on microbial products</p>
		<p>Archegoniates & Plant Architecture (B040201T)</p>	<p>After the completion of the course the students will be able to- CO1- Develop critical understanding on morphology, anatomy and reproduction of Bryophytes, Pteridophytes and Gymnosperms CO2- Understanding of plant evolution and their transition to land habitat. CO3- Understand morphology, anatomy, reproduction and developmental changes therein through typological study and create a knowledge base in understanding the basis of plant diversity, economic values & taxonomy of plants. CO4- Understand the details of external and internal structures of flowering plants.</p>
		<p>Land Plants Architecture (B040202P)</p>	<p>CO1- The students will be made aware of the group of plants that have given rise to land habit and the flowering plants. Through field study they will be able to see these plants grow in nature and become familiar with the biodiversity. CO2- Students would learn to create their small digital reports where they can capture the zoomed in and zoomed out pictures as well as videos in case they are able to find some rare structure or phenomenon related to these plants. CO3- Develop an understanding by observation and table study of representative members of phylogenetically important groups to learn the process of evolution in a broad sense. CO4- Understand morphology, anatomy, reproduction</p>

			<p>and developmental changes therein through typological study and create a knowledge base in understanding plant diversity, economic values & taxonomy of lower group of plants 5. CO5- Understand the composition, modifications, internal structure & architecture of flowering plants for becoming a Botanist.</p>
		<p>Flowering Plants Identification & Aesthetic Characteristics (B040301T)</p>	<p>After the completion of the course the students will be able to-</p> <p>CO1- To gain an understanding of the history and concepts underlying various approaches to plant taxonomy and classification.</p> <p>CO2- To learn the major patterns of diversity among plants, and the characters and types of data used to classify plants.</p> <p>CO3- To compare the different approaches to classification with regard to the analysis of data.</p> <p>CO4- To become familiar with major taxa and their identifying characteristics, and to develop in depth knowledge of the current taxonomy of a major plant family.</p> <p>CO5- To discover and use diverse taxonomic resources, reference materials, herbarium collections, publications.</p> <p>CO6- For the entrepreneur career in plants, one can establish a nursery, Start a landscaping business, Set up a farm Or Run a plantation consultancy firm</p>
		<p>Plant Identification Technology (B040302P)</p>	<p>After the completion of the course the students will be able-</p> <p>CO1- To learn how plant specimens are collected, documented, and curated for a permanent record.</p>

			<p>CO2- 2. To observe, record, and employ plant morphological variation and the accompanying descriptive terminology.</p> <p>CO3- To gain experience with the various tools and means available to identify plants.</p> <p>CO4- To develop observational skills and field experience.</p> <p>CO5- To identify a taxonomically diverse array of native plants.</p> <p>CO6- To recognize common and major plant families.</p> <p>CO7- 7. To Understand aesthetic characters of flowering plants by making-landscapes, gardens, bonsai, miniatures.</p> <p>CO8- Comprehend the concepts of plant taxonomy and classification of Angiosperms.</p>
		<p>Economic Botany, Ethnomedicine & Phytochemistry (B040401T)</p>	<p>After the completion of the course the students will be able to-</p> <p>CO1- Understand about the uses of plants-will know one plant-one employment</p> <p>CO2- Understand phytochemical analysis related to medicinally important plants and economic products produced by the plants</p> <p>CO3- Know about the importance of Medicinal plants and its useful parts, economically important plants in our daily life and also about the traditional medicines and herbs, and its relevance in modern times.</p>
		<p>Commercial Botany & Phytochemical Analysis (B040402P)</p>	<p>After the completion of the course the students will be able to-</p> <p>CO1- Know about the commercial products produced from plants.</p> <p>CO2- Gain the knowledge about cultivation practices of some economic crops.</p>

			<p>CO3- Understand about the ethnobotanical details of plants.</p> <p>CO4- Learn about the chemistry of plants & herbal preparations</p> <p>CO5- Can become a protected cultivator, aromatic oil producer, Pharmacologist or quality analyst in drug company.</p>
		<p>Plant Physiology, Metabolism & Biochemistry (B040501T)</p>	<p>After the completion of the course the students will be able to-</p> <p>CO1- Understand the role of Physiological and metabolic processes for plant growth and development.</p> <p>CO2- Learn the symptoms of Mineral Deficiency in crops and their management.</p> <p>CO3- Assimilate Knowledge about Biochemical constitution of plant diversity.</p> <p>CO4- Know the role of plants in development of natural products, nutraceuticals, dietary supplements, antioxidants</p>
		<p>Molecular Biology & Bioinformatics (B040502T)</p>	<p>After the completion of the course the students will be able to-</p> <p>CO1- Understand nucleic acids, organization of DNA in prokaryotes and Eukaryotes, DNA replication mechanism, genetic code and transcription process.</p> <p>CO2- Know about Processing and modification of RNA and translation process, function and regulation of expression.</p> <p>CO3- Gain working knowledge of the practical and theoretical concepts of bioinformatics</p>
		<p>Experiments in Physiology, Biochemistry &</p>	<p>After the completion of the course the students will be able to-</p> <p>CO1- Know and authentic the physiological processes</p>

		Molecular biology (B040503P)	undergoing in plants along with their metabolism CO2- Identify Mineral deficiencies based on visual symptoms CO3- Understand and develop skill for conducting molecular experiments for genetic engineering
		Project in Botany for Pre-graduation (B040504R)	CO1- Project work will supplement field experimental learning and deviations from classroom and laboratory transactions. CO2- Project work will enhance the capability to apply gained knowledge and understanding for selecting, solving and decision-making processes. CO3- It will promote creativity and the spirit of enquiry in learners. CO4- They will learn to consult Scientists, libraries, laboratories and herbariums and learn importance of discussions, Botanical & field trips, print and electronic media, internet etc. along with data documentation, compilation, analysis & representation in form of dissertation writing. CO5- It will enhance their abilities, enthusiasm, and interest.
		Cytogenetics, Plant Breeding & Nanotechnology (B040601T)	After the completion of the course the students will be able- CO1- Acquire knowledge on cell ultrastructure. CO2- Understand the structure and chemical composition of chromatin and concept of cell division. CO3- Interpret the Mendel's principles, acquire knowledge on cytoplasmic inheritance and sex-linked inheritance. CO4- Understand the concept of 'one gene one

			enzyme hypothesis' along with the molecular mechanism of mutation.
		Ecology & Environment (B040602T)	<p>CO1- Acquaint the students with complex interrelationship between organisms and environment.</p> <p>CO2- Make them understand methods for studying vegetation, community patterns and processes, ecosystem functions, and principles of phytogeography.</p> <p>CO3- This knowledge is critical in evolving strategies for sustainable natural resource management and biodiversity conservation.</p>
		Lab on Cytogenetics, Conservation & Environment management (B040603P)	<p>After the completion of the course the students will be able-</p> <p>CO1- To perform all experiments related to the semester-i.e., Plant tissue cultured plants, conducting breeding on field, conserving and depolluting the environment.</p> <p>CO2- Can be employed in environment impact assessment companies & start his own venture.</p>
		Project in Botany for Graduation (B040604R)	<p>CO1- Project work will supplement field experimental learning and deviations from classroom and laboratory transactions.</p> <p>CO2- Project work will enhance the capability to apply gained knowledge and understanding for selecting, solving and decision-making processes</p> <p>CO3- It will promote creativity and the spirit of enquiry in learners.</p> <p>CO4- They will learn to consult Scientists, libraries, laboratories and herbariums and learn importance of discussions, Botanical & field trips, print and</p>

			electronic media, internet etc. along with data documentation, compilation, analysis & representation in form of dissertation writing CO5- It will enhance their abilities, enthusiasm, and interest.
Bachelors of Science (Mathematics)	<p>PO1 - Provide foundational knowledge in mathematics, helping students understand basic and advanced concepts.</p> <p>PO2 - Enhance quantitative skills and foster the ability to pursue higher studies or research in mathematics.</p> <p>PO3 - Develop problem-solving abilities that are applicable to real-world issues, making students more employable in both government and private sectors.</p> <p>PO4 - Instill a scientific and mathematical temper, fostering critical and analytical thinking.</p> <p>PO5 - Master practical applications, including the use of software like Mathematica, MATLAB, and Scilab for solving mathematical problems</p>	Differential Calculus & Integral Calculus (B030101T)	<p>CO1 - Understand the convergence, divergence, and advanced tests for sequences and series, including their properties and applications.</p> <p>CO2 - Develop a deep understanding of limit concepts, continuity, and differentiability, supported by key theorems such as Cauchy, Heine, and Borel's.</p> <p>CO3 - Apply calculus concepts in curve tracing, parametric representations, and geometric interpretations like tangents, normals, and asymptotes.</p> <p>CO4 - Gain proficiency in Riemann integrals, improper integrals, Beta and Gamma functions, and practical applications of integral calculus.</p> <p>CO5 - Explore gradient, divergence, curl, and vector integration, including Gauss, Green, and Stokes' theorems, for solving multi-dimensional problems.</p>

		<p>Practical (B030102P)</p>	<p>CO1 - Ability to sketch parametric curves like Trochoid, Cycloid, Epicycloid, Hypocycloid, and trace conics in Cartesian coordinates. CO2 - Skill in graphing circular and hyperbolic functions, and representing complex numbers and their operations graphically (polar form, addition, multiplication, etc.). CO3 - Perform various matrix operations (addition, multiplication, inverse, eigenvalues/vectors, solving linear equations), and verify the Cayley-Hamilton theorem. CO4 - Study and visualize convergence of sequences and series, including Bolzano-Weierstrass theorem, using plotting techniques. CO5 - Apply Cauchy's root test and Ratio test to study the convergence/divergence of infinite series by plotting partial sums and n-th terms.</p>
		<p>Matrices and Differential Equations & Geometry (B030201T)</p>	<p>CO1 - Develop expertise in matrix operations, rank, inverse, and solving systems of linear equations using consistency theorems and transformations. CO2 - Understand eigenvalues, eigenvectors, the Cayley-Hamilton theorem, and properties of complex, exponential, logarithmic, and hyperbolic functions. CO3 - Solve various types of first-order and higher-order differential equations and apply them to problems in geometry and trajectories. CO4 - Analyze and trace conics, study their properties, and explore equations in both Cartesian and polar forms. CO5 - Master 3D coordinate systems, projections,</p>

			<p>and the geometry of planes, lines, spheres, cones, cylinders, and conicoids.</p>
		<p>Algebra & Mathematical Methods (B030301T)</p>	<p>CO1 - Understand group structures, subgroups, cosets, and key theorems, including Lagrange's, Cayley's, Fermat's, and Euler's, with applications in abstract algebra. CO2 - Explore the properties of rings, subrings, fields, ideals, and ring homomorphisms, focusing on their algebraic significance. CO3 - Analyze functions of two variables through limits, continuity, differentiation, Taylor's theorem, and optimization methods like Lagrange multipliers. CO4 - Apply Laplace and Fourier transforms to solve differential equations and expand functions, with focus on theorems and practical applications. CO5 - Develop proficiency in probability theory, distributions (binomial, Poisson, and normal), curve fitting, correlation, and regression analysis.</p>

		<p>Differential Equation & Mechanic (B030401T)</p>	<p>CO1 - Solve second-order linear differential equations with variable coefficients using methods like variation of parameters, series solutions, and special functions like Bessel, Legendre, and Hypergeometric.</p> <p>CO2 - Analyze and solve first and second-order PDEs using techniques like Lagrange's, Charpit's, and Monge's methods, and classify linear PDEs of the second order.</p> <p>CO3 - Apply principles of work-energy, virtual work, and equilibrium to problems involving forces in three dimensions, central axes, and wrenches.</p> <p>CO4 - Study motion under different force laws, including SHM, motion in resisting mediums, constrained motion, and motion on plane curves.</p> <p>CO5 - Understand particle motion under varying mass (e.g., rockets), central orbits, Kepler's laws, and the dynamics of rotating frames and Earth.</p>
		<p>Group and Ring Theory & Linear Algebra (B030501T)</p>	<p>CO1 - Understand automorphism groups, Sylow theorems, conjugacy classes, and their applications to finite simple groups and factor groups.</p> <p>CO2 - Explore polynomial rings, divisibility, irreducibility, and unique factorization in various domains, including principal ideal and Euclidean domains.</p> <p>CO3 - Analyze vector spaces, subspaces, basis, dimension, and quotient spaces with practical insights into linear independence and dependence.</p> <p>CO4 - Master linear transformations, their algebra, matrix representation, and key concepts like rank-nullity theorem and characteristic values.</p> <p>CO5 - Develop skills in orthogonality, Gram-</p>

			<p>Schmidt process, and norms while applying Bessel's inequality and exploring bilinear and quadratic forms.</p>
		<p>Number Theory & Game Theory (B030502T)</p>	<p>CO1 - Develop a strong understanding of divisibility, primes, congruences, and key theorems such as Fermat's, Euler's, Wilson's, and the Chinese Remainder Theorem. CO2 - Explore quadratic residues, Legendre and Jacobi symbols, and apply the quadratic reciprocity law to solve modular arithmetic problems. CO3 - Analyze generating functions, solve recurrence relations (both homogeneous and inhomogeneous), and explore their applications in combinatorics and partitions. CO4 - Understand the concepts of normal form games, Nash equilibria, pure and mixed strategies, and two-person zero-sum games. CO5 - Apply the fundamental theorem of rectangular games, dominance, graphical methods, and simplex techniques to solve $m \times n$ games and relate them to linear programming problems.</p>

		Graph Theory & Discrete Mathematics (B030502T)	<p>CO1 - Understand the properties and types of graphs (simple, bipartite, Eulerian, Hamiltonian), graph operations, and key algorithms like Dijkstra's for shortest paths.</p> <p>CO2 - Analyze tree types, spanning trees, and graph coloring techniques, including vertex coloring and chromatic numbers, with real-world applications.</p> <p>CO3 - Develop a solid understanding of propositional and predicate logic, truth tables, proof techniques, and relational structures, including partial orderings.</p> <p>CO4 - Explore Boolean algebra, Karnaugh maps, recurrence relations, and generating functions, applying these concepts to solve combinatorial problems.</p> <p>CO5 - Gain knowledge of finite automata concepts, including DFA, N DFA, Mealy and Moore machines, and their minimization, with applications in theoretical computer science.</p>
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Differential Geometry &
Tensor Analysis
(B030502T)

CO1 - Analyze the local geometry of curves and surfaces, including tangent, normal, osculating planes, geodesics, and surfaces like helicoids and ruled surfaces.

CO2 - Understand intrinsic and extrinsic surface properties, including Gaussian and mean curvature, and apply the Gauss-Bonnet theorem to relate topology and geometry.

CO3 - Develop a strong foundation in tensor operations, including transformation laws, contraction, symmetric tensors, and the tensor product of vector spaces.

CO4 - Apply concepts of contravariant, covariant, and mixed tensors to solve problems involving Christoffel symbols, covariant differentiation, and their transformations.

CO5 - Explore Riemannian spaces, curvature tensors, Ricci tensors, scalar curvature, and Einstein tensors, with an emphasis on their geometric and physical interpretations.

		<p>Metric Space & Complex Analysis (B030601T)</p>	<p>CO1 - Understand the core concepts of metric spaces, including sequences, Cauchy sequences, completeness, and topological notions like open and closed sets, subspaces, and dense sets.</p> <p>CO2 - Analyze continuity, uniform continuity, connectedness, compactness, and their roles in metric spaces, with applications of the Banach fixed point theorem.</p> <p>CO3 - Explore analytic functions, Cauchy-Riemann equations, and the mapping properties of elementary functions like exponential, logarithmic, and trigonometric functions.</p> <p>CO4 - Master integration in the complex plane, including contour integrals, Cauchy-Goursat theorem, Cauchy integral formula, and their applications to the fundamental theorem of algebra and Liouville's theorem.</p> <p>CO5 - Analyze Taylor and Laurent series, convergence of power series, and the theory of residues, applying them to solve problems involving isolated singularities and contour integration.</p>
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Numerical Analysis &
Operations Research
(B030602T)

CO1 - Develop proficiency in solving nonlinear equations using various methods like bisection, secant, Newton-Raphson, and interpolation techniques (Lagrange and Hermite), alongside difference schemes and divided differences.

CO2 - Apply numerical differentiation techniques and integration methods, including Newton-Cotes and Gaussian quadrature, as well as solving linear systems using direct and iterative methods (Jacobi, Gauss-Seidel, LU decomposition).

CO3 - Solve ordinary differential equations using single-step (Euler, Runge-Kutta) and multi-step methods (Milne-Simpson), along with polynomial approximation methods (least squares, Chebyshev polynomials).

CO4 - Understand the principles of linear programming, including formulation of problems, graphical method, simplex method, duality, and sensitivity analysis, while addressing transportation and assignment problems.

CO5 - Master advanced techniques in linear programming, including the resolution of degeneracy, artificial variables, revised simplex method, and comparisons between Big-M and two-phase methods.

		<p>Practical (B030603P)</p>	<p>CO1 - Develop the ability to solve transcendental and algebraic equations using different numerical methods like Bisection, Newton-Raphson, Secant, and Regula Falsi methods, including handling simple, multiple, and complex roots. CO2 - Implement algorithms for solving systems of linear equations using LU decomposition, Gaussian elimination, Gauss-Jacobi, and Gauss-Seidel methods, enhancing computational skills. CO3 - Gain practical experience in performing interpolation using Lagrange interpolation and Newton's forward, backward, and divided difference methods to approximate functions based on discrete data points. CO4 - Apply numerical integration methods such as Trapezoidal Rule, Simpson's 1/3 Rule, Weddle's Rule, and Gauss Quadrature to approximate definite integrals. CO5 - Use the Power method to find eigenvalues for matrices (up to 4x4), which strengthens understanding of linear algebra and matrix computation.</p>
<p>BA (English)</p>	<p>PO1- Develop an appreciation of English language, its connotations and interpret and appreciate the didactic purpose of literature. PO2- Sensitize students to the aesthetic, cultural and social aspects of literature. PO3- Develop a more complex understanding of the history, literature, narrative techniques, drama techniques, kind of fiction and drama existing in Britain, America and India.</p>	<p>English Prose and Writing Skills (A040101T)</p>	<p>CO1- Understand Indian English Writing as a new form of Indian culture and voice in which India converses regularly. They will be able to understand contributions of various authors in the growth of Indian English Writing CO2- Understand the formal qualities of a text, intricacies of structure, stylistics and figurative elements found in the text. CO3- Identify the writings of classic prose and short story writers like Chekhov, Maupassant and O' Henry</p>

	<p>PO4- Develop an insight regarding the idea of world literature and the pertinent issues of feminism, racism and diasporic relocations.</p> <p>PO5- Recreate a response through creative indulgences like script-writing, dialogue writing, and be able to exploit his/her creative potential through online media like blogging.</p> <p>PO6- Engage students with various strategies of drafting and revising, style of writing and analytical skills, diagnosing and developing scholarly methodologies, use of language as a means of creative expression, will make them effective thinkers and communicators.</p> <p>PO7- Assist students in the development of intellectual flexibility, creativity, and cultural literacy so that they may engage in life-long learning.</p>		<p>CO4- Comprehend the culture, author's biography and historical context of the prescribed prose works</p> <p>CO6- Get a wide exposure of eminent writers like Kalam, Amartya Sen, Anita Desai, Woolf and M.R. Ana.</p> <p>CO7- Perform basic functions of a word processor, Excel spreadsheet and PowerPoint presentation practically and do online communication like content writing and blogging.</p> <p>CO8- Do official communication by writing official letters/complaint letters.</p>
		<p>English Poetry (A040201T)</p>	<p>CO1- Understand the basic terminology and practical elements of poetry</p> <p>CO2- Analyse the underlying meaning of a poem by using the elements of poetry</p> <p>CO3- Comprehend the meaning of words, phrases and sentences in a given context</p> <p>CO4- Identify the representative poets and writers of 16th, 17th, 18th and 19th and 20th century</p> <p>CO5- Identify the devices used by the poet, the mood, the atmosphere, the voice, the stanzaic form, rhyme pattern and metre scheme</p> <p>CO6- Discuss the significance of the literary period of the text by analysing the effects of the major events of that period</p>
		<p>British and American Drama (A040301T)</p>	<p>CO1- Develop an understanding of various types of drama & related literary terms</p> <p>CO2- Trace the origin and growth of drama in England and America</p> <p>CO3- Comprehend the political, economic, social and intellectual background leading to the rise of drama in England and America</p>

			<p>CO4- Comprehend the general features of Shakespearean plays</p> <p>CO5- Analyse and appreciate the representative works of British and American Drama</p> <p>CO6- Demonstrate the ability to contextualize the works of American dramatists, interpret the thematic and stylistic elements of the plays and appreciate their literary worth, social relevance and timeless appeal</p> <p>CO7- Comprehend the trends in modern drama through the study of poetic drama and problem plays.</p>
		<p>Indian Literature in Translation (A040401T)</p>	<p>CO1- Understand the history of translation and various forms of translations</p> <p>CO2- Analyse the translation tools to make use of technology like computer and mobile in the process of translation</p> <p>CO3- Contextualize the texts of Jaishankar Prasad, Amrita Pritam, and Tagore in their respective social and cultural milieu</p> <p>CO4- Gain a historical vision of the partition trauma and the contemporary issues of the tribal people through the writings of Bhisham Sahni and Mahasweta Devi</p> <p>CO5- Enhance job opportunities by fostering translation skills</p> <p>CO6- Understand Indian consciousness and review the past through translated texts</p>
		<p>Classical Literature & History of English Literature (A040501T)</p>	<p>CO1- Develop an understanding of the historical background of Greek and Roman literature and history</p> <p>CO2- Recognise the great works of unparalleled classical writers like Plato, Homer and Sophocles</p>

			<p>CO3- Develop an understanding of the evolution of English Literature, the concept, causes and impact of Renaissance and Reformation</p> <p>CO4- Develop an acquaintance with major religious, political and social movements from 15th to 20th century and their influence on English literature</p> <p>CO5- Comprehend the basic difference and special characteristics of the major literary tendencies of various ages and develop familiarity with major literary works by British writers in the field of Poetry, Drama and Fiction</p> <p>CO6- Appreciate the special characteristics of the poetry of Pre-Raphaelites and Naughty-Nineties</p> <p>CO7- Comprehend the trends in the poetry, drama and fiction of 20th century English literature</p>
		<p>Fiction (A040502T)</p>	<p>CO1- Develop an understanding of the growth of novel form and its various types</p> <p>CO2- Enhance their reading skills and understand how to represent their experience and ideas critically, creatively, and persuasively through the medium of English language</p> <p>CO3- Get acquainted with different cultures, myths and social conservation through the reading of selected novels of Britain, America and India</p> <p>CO4- Learn human values and behavioural pattern from the prescribed novels and develop an understanding of the human race</p> <p>CO5- Exposed to the unflattering portrayal of the contemporary Indian society through popular works of Indian fiction writers in English</p>

		<p>Indian & New Literatures in English (A040601T)</p>	<p>CO1- Develop an understanding of the Indian freedom struggle, the contemporary political, social and economic scenario and the also the trauma of the partition CO2- Analyse and evaluate the difference in the theme and background of the works of Indian writers in English and the English writers already studied in the previous years CO3- Demonstrate, through discussion and writing, an understanding of significant cultural and societal issues presented in Indian English literature CO4- Appraise the values and issues arising from colonialism CO5- Familiarize themselves with the similar (yet different) socio-historic conditions reflected in the literature of the various colonies CO6- Comprehend how ‘New Literatures’ incorporates very different literary products, each with its own cultural, social and geographical specificity CO7- Comprehend and analyse the poetic discourses of poets like Pablo Neruda, Margaret Atwood, Judith Wright, Patrick White and Sujata Bhatt and the variations in their themes, styles and responsiveness</p>
		<p>Literature in Films & Media Studies (A040602T)</p>	<p>CO1- Develop an understanding of the technical terminology associated with film and media studies CO2- Interpret films as text and evaluate them critically CO3- Appraise the process of adaption of texts into films CO4- Recognize the nuances of film narration CO5- Assess various film genres and their characteristics</p>

			<p>CO6- Appreciate the works of prescribed writers and the directors as well who directed their adaptations</p> <p>CO7- Exercise critical viewing and develop reading skills in determining the success of adaptations and present their assessments through a variety of mediums including presentations and essays</p>
		Media and Journalistic Writing (A040603T)	<p>CO1- Understand different types of journalism and their importance.</p> <p>CO2- Comprehend various principles of mass communication.</p> <p>CO3- Differentiate between various forms of media & journalistic writing and reporting.</p> <p>CO4- Understand the meaning and nature of public speaking.</p> <p>CO5- Identify social media norms and online journalism.</p> <p>CO6- Write in various journalistic formats effectively.</p> <p>CO7- Understand the meaning and nature of public speaking.</p> <p>CO8- Edit reports and create engaging advertisements.</p>
BA (Philosophy)	<p>PO1- Understand the broad ideas that are enshrined in the basic thinking of various centres of philosophy</p> <p>PO2- Critically analyse the hypothesis, theories, techniques and definitions offered by philosophers</p> <p>PO3- Understand many theories related to Philosophy of Religion, which will be helpful in solving many misconceptions related to Religion.</p> <p>PO4- Utilize philosophy to understand social realities and problems and to come up with ideal solutions to them</p>	Indian Philosophy (A100101T)	By studying this course, a student will learn various treatise on Classical Indian Philosophy and enquiries into the different texts which laid the foundation for Indian Philosophy.
		Western Philosophy (A100201T)	In this course, the student will learn the various thinkers who shaped the form of western philosophy.
		Yoga (A100202P)	Attainment of physical, mental, and emotional well-being through the practice of yoga, fostering flexibility, strength, mindfulness, and holistic health.

<p>PO5- Identify how deeply Philosophy is connected to other disciplines like Social Science, Political Science and Natural Sciences.</p> <p>PO6- Understand various issues of Applied Philosophy which are very important and relevant in contemporary world.</p> <p>PO7- Integrate their physical, mental and spiritual faculties so that the students can become healthier and more integrated members of the society and of the nation by the practice of Yoga.</p> <p>PO8- Learn tools, techniques and skills regarding the research-oriented activities by the study & practice of project work</p>	<p>Ethics-Indian and Western (A100301T)</p>	<p>This course introduces the idea of the ethics and its relevance to society. In this paper a student studies some of prominent theories related to Indian and Western Ethics.</p>
	<p>Indian Logic (A100401T)</p>	<p>This course introduces the Indian logic. By studying this course, a student will develop an understanding of various concepts & theories related to Indian logical reasoning.</p>
	<p>Western Logic (A100402T)</p>	<p>This course introduces the Western logic. By studying this course, a student will develop an understanding of various concepts & theories related to Western logical reasoning.</p>
	<p>Yoga (A100403P)</p>	<p>Study and practice of this course will provide better stamina, clarity of thoughts, a sense of inner peace, calmness, and stability in your body, discipline your thoughts and improve concentration.</p>
	<p>Problems of Philosophy- Indian & Western (A100501T)</p>	<p>By studying this course, a student will learn various epistemological and metaphysical problems & theories related to Indian & Western philosophy.</p>
	<p>Applied Philosophy (A100502T)</p>	<p>By studying this course, a student will learn various issues of Applied Philosophy which are relevant in contemporary world.</p>
	<p>Research Project I (A100503R)</p>	<p>As the project works play important role in developing the essential attributes of research, by the end of this Course the student would be able to learn tools, techniques and skills regarding the research-oriented activities under the continuous guidance of faculty members.</p>
	<p>Philosophy of Religion (A100601T)</p>	<p>By studying this course, a student will learn various philosophies and theories related to Religion & their relevance.</p>

		Socio-political Philosophy (A100602T)	By studying this course, a student will learn various social & political aspects of philosophy especially in the context of Indian society.
		Yoga (A100603P)	Study and practice of this course will improve concentration powers, better stamina and healing of body, mind and soul.
		Research Project II (A100604R)	As the project works play important role in developing the essential attributes of research, by the end of this Course the student would be able to learn tools, techniques and skills regarding the research-oriented activities under the continuous guidance of faculty members.
BA (Economics)	<p>PO1- Graduates will demonstrate proficiency in economic theories, quantitative methods, and analytical tools for assessing and solving economic challenges.</p> <p>PO2- They will develop the ability to critically evaluate economic policies, understand their implications, and contribute to informed decision-making.</p> <p>PO3- Possessing research skills, graduates can gather, analyze, and present economic data effectively, both orally and in written form.</p> <p>PO4- The program aims to cultivate a global perspective, allowing students to comprehend and engage with international economic issues, fostering adaptability in a diverse and interconnected world.</p> <p>PO5- Equipped with a strong ethical foundation, graduates will emphasize social responsibility and an awareness of the ethical considerations involved in economic decision-making.</p>	Principles of Microeconomics (A080101T)	<p>CO1- The students are familiarized with basic concepts of microeconomics such as laws of demand and supply and elasticity etc so that he/she can comprehend them & familiarize with day today happenings.</p> <p>CO2- The students learn and understand the concepts of consumer behaviour like cardinal utility and ordinal utility analysis.</p> <p>CO3- The students learn and understand application of Indifference curve analysis in deriving demand curves, price effect, income effect and substitution effect.</p> <p>CO4- The students learn and understand the Theory of production- iso-quants, laws of returns to scale, law of variable proportion.</p> <p>CO5- The students learn, understand and compare between the Traditional and modern theory of cost.</p> <p>CO6- Demonstrate an understanding, usage and application of basic economic principles.</p> <p>CO7- Describe and apply the methods for analysing</p>

			<p>consumer behaviour through demand and supply, elasticity and marginal utility.</p> <p>CO8- To analyse the behavioural patterns of different economic agents regarding profit, price, cost etc.</p> <p>CO9- The decision-making process in different market situations such as perfect competition, monopolistic competition, monopoly and oligopoly markets.</p> <p>CO10- To deal with the advance theoretical issues and their practical applications of distribution theories.</p> <p>CO11- General equilibrium, economic efficiency and market failure.</p>
		<p>Macroeconomics (A080201T)</p>	<p>CO1- Students are able to explain national income, comprehend calculation methods of national income, and concepts related to national income.</p> <p>CO2- Students are able to comprehend classical theory of employment and the Keynesian approach.</p> <p>CO3- Students are able to comprehend the concept of multiplier and it's working.</p> <p>CO4- Students are able to understand the relationship between inflation and employment.</p> <p>CO5- Students are able to relate factors determining national income such as consumption, saving and investment.</p> <p>CO6- Students are able to analyse different phases of trade cycle, demonstrate various trade cycle theories. understand the impact of cyclical fluctuation on the growth of business, and lay policies to control trade cycle.</p>
		<p>History of Economic Thought (A080301T)</p>	<p>CO1- To learn and discuss, at an advanced undergraduate level, how the economic thought has evolved over time.</p>

			<p>CO2- Introducing students to the critical comparison of the contributions of the main schools of economics.</p> <p>CO3- To introduce & highlight before the students about Indian Economic Thinkers and their valuable contribution in the field of Economics.</p> <p>CO4- The classical, the marginalize revolution and its application to the theories of general and partial equilibrium, the current macroeconomic debate between the neo-classical and the Keynesian school.</p>
		<p>Money, Banking & Public Finance (A080401T)</p>	<p>CO1- Understand simple concepts related with monetary economics and banking theory.</p> <p>CO2- Correlate and apply to current events & key models and concepts of monetary economics and banking theory.</p> <p>CO3- Appreciate the potential importance of monetary phenomenon in the economy.</p> <p>CO4- Understand the sources of finance both public and private</p> <p>CO5- Demonstrate the role of government to correct market failures and possible advantage of public financing.</p> <p>CO6- Understand the possible burden, benefits and distribution of various types of taxes among various classes of people, know the general trend and impact on general welfare and arouse them to suggest good and bad tax system.</p>
		<p>Economic Growth & Development (A080501T)</p>	<p>CO1- Students should be able to comprehend the concept and meaning of economic growth and economic development.</p> <p>CO2- Students should be able to distinguish between economic growth and economic development.</p>

			<p>CO3- Students should be able to comprehend the issues and challenges in economic growth and development.</p> <p>CO4- Students should be able to comprehend and explain the concept of poverty and human development & the related concepts.</p> <p>CO5- Students should be familiar with the approaches to development.</p> <p>CO6- Students should be able to understand and explain the factors and variable of economic development.</p> <p>CO7- Students are able to understand how international factors facilitate and impede economic development.</p>
		<p style="text-align: center;">Environmental Economics (A080502T)</p>	<p>CO1- Students should be familiar with the basic concepts of ecology environment and economy.</p> <p>CO2- Students to understand the solution to environmental problems- the command and control approach, market based methods, tax tradable pollution permit, etc, carbon trading</p> <p>CO3- Students should be familiar with the concept of Sustainable development, environmental impact assessment and Global and local environmental concerns.</p> <p>CO4- Students should be comprehend the Local Issues of Economic Bearing related to environment & development.</p> <p>CO5- Students should realize the importance and influence of environment on the economy including the quality of manpower.</p> <p>CO6- Students should realize the importance to make cleaner environment so as to achieve harmonious</p>

			<p>development.</p> <p>CO7- Students should comprehend that environmental problem is not the problem of a single country or region but a global problem/issue.</p> <p>CO8- Demonstrate an awareness of economic growth problems, issues in globalisation, and provide grounding in major growth strategies and development.</p>
		<p>International Economics (A080503T)</p>	<p>CO1- Students should be able to understand and explain the concept, need, significance and scope of international economics.</p> <p>CO2- Students should be familiar with the approaches of international trade.</p> <p>CO3- Students should be familiar with and are able to explain the economic integration at the global level and the formation of groups.</p> <p>CO4- Students are familiar with the international organizations and their objectives. Students should be able to analyse the importance and relevance of these international organizations.</p>
		<p>Elementary Statistics based Project (A080603R)</p>	<p>CO1- Students to be familiar with the concepts in Statistics.</p> <p>CO2- The concepts comprehended by the students shall be put to use in practice.</p> <p>CO3- The students become familiar with the practical aspects of preparing a questionnaire/interview schedule and putting them in usage.</p> <p>CO4- The information data collected by the students should be analysed with the help of Statistical Tools taught so as to derive inferences.</p> <p>CO5- The students shall experience the practical</p>

			<p>aspect of the theory of statistics being taught in the class room environment.</p> <p>CO6- The students are able to use statistical tools vis-à-vis given real life situation.</p> <p>CO7- Practical work to be based on the topics covered in the contents.</p>
		<p>Indian Economy & Economy of Uttar Pradesh (A080601T)</p>	<p>CO1- Students should be able familiar with the basic characteristics of Indian economy.</p> <p>CO2- Students should be able familiar with the it's potential on natural resources of Indian economy and the economy of Uttar Pradesh.</p> <p>CO3- Students are able to understand the importance, causes and impact of population growth and its distribution. translate and relate them with economic development.</p> <p>CO4- Students are able to develop an understanding about Uttar Pradesh, its demographic feature, natural resources and factors that can stimulate its economic growth and development.</p> <p>CO5- Students should be familiar with the rural development of Uttar Pradesh over the period of time.</p> <p>CO6- Students should be familiar with the industrial development in India and in Uttar Pradesh.</p>
		<p>Agriculture Economics (A080602T)</p>	<p>CO1- Students should be able to comprehend and explain the approaches to economic development with respect to dualistic development.</p> <p>CO2- Students should be able to understand and explain the basics of agriculture economics.</p> <p>CO3- Students should be familiar with labour issues in agriculture sector.</p>

			<p>CO4- Students should be able to explain the significance of agriculture in the economic growth and economic development of an economy and in case of Indian Economy.</p> <p>CO5- Students should be familiar with the institutional initiatives to strengthen the rural and agricultural development to achieve self-sufficiency.</p> <p>CO6- Students should be able to comprehend the role of credit in the development of agriculture in a country like India and the significance of institutional mechanism in this regard.</p>
		<p>Elementary Mathematics (A080603T)</p>	<p>CO1- Students should be familiar with the basic concepts of mathematics and their application in economics.</p> <p>CO2- Students are able to comprehend & explain the concepts of straight lines slope etc of mathematics and its application in economics.</p> <p>CO3- Students should be able to understand basics of differential & its application in economics.</p> <p>CO4- Students should be able to understand and work with matrices and determine if a given square matrix is invertible.</p> <p>CO5- Learn about and work with vector spaces and subspaces.</p> <p>CO6- Students are able to understand and work with the concepts of linear programming & graphic methods.</p>
		<p>Project/Dissertation (A080604R)</p>	<p>CO1- The objective of Introducing Dissertation/Project at the graduation level is to familiarise, acquaint and experience the local issues of economic implication or focused on economic wellbeing and behaviour of consumers/citizens.</p>

			<p>CO2- It aims at enabling the students to use and apply the learned economic principles vis-a-vis local economic Issues.</p> <p>CO3- To enable them to learn preparation of questionnaire/interview schedule.</p> <p>CO4- The Template/Format of the Dissertation/Project shall be developed by the respective Department.</p> <p>CO5- The idea behind this is to develop economic thinking in the students through direct experience to real life.</p>
BA (Sociology)	<p>PO1- This course will introduce students to new concepts of Sociology discipline.</p> <p>PO2- These concepts will enhance the conceptual learning and understanding of the basic concepts used in Sociology.</p> <p>PO3- This course will contribute in enriching the vocabulary and scientific temperament of the students.</p> <p>PO4- The course is designed to incorporate all the key concepts of sociology which would enable the learner to develop keen insights to distinguish between the commonsense knowledge and Sociological knowledge.</p> <p>PO5- This course provides comprehensive understanding of Indian society.</p>	<p>Introduction to basic concepts of Sociology (A070101T)</p>	<p>This paper will introduce students to new concepts of Sociology discipline. These concepts will enhance the conceptual learning and understanding of the basic concepts used in Sociology. This paper will contribute in enriching the vocabulary and scientific temperament of the students. The course is designed to incorporate all the key concepts of sociology which would enable the learner to develop keen insights to distinguish between the commonsense knowledge and Sociological knowledge.</p>
		<p>Society in India- Structure, Organisation & Change (A070201T)</p>	<p>This paper is designed in this manner, so that students are introduced to the concepts related to an Society. They are made familiar with the Indian Society, its linkages and continuity with past and present. It gives insights to analyse contemporary Indian society. This paper provides comprehensive understanding of an society.</p>
		<p>Writing skills development on topics Contemporary</p>	<p>This is the practical paper introduced in the second semester of the certificate course in order to develop writing skills among the students of Sociology. This would enhance and inculcate the analytical skills</p>

		Sociological Importance (A070202P)	among the students. The paper is designed to enrich the conceptual vocabulary of the students, such that they are equipped with the writing style in Sociology. This paper is presumably beneficial for the students who are interested in the field of Media, Journalism. Essay writer, Column writer, Psephology, Journalism.
		Social change and social movement (A070301T)	This paper is designed in a manner, so that students are introduced to the concepts related to social change and Social Movement. This course will introduce students to the dynamic aspect and dissension tendencies of society. The critical evaluation would enable students to come out with better suggestions, contributing in cohesion of society.
		Social Problems and Social Development in India (A070401T)	The syllabus is designed to introduce students to the emerging social problems, the concept and issues of development in Indian Society. The course intends to focus upon the deviant and delinquent behaviour, issue of corruption and other disorganizational and structural problems of Indian Society. The endeavour of the course is to make learners aware about the social problems and developmental issues in the Indian Society
		Project on Sustainable Society (A070401R)	The syllabus designed to introduce students to the emerging social problems and the concept and issues of development in Indian Society. The project work will engage students directly in practical knowledge about the conducting research project. This project work will help learners to know about the issue of sustainability and policies & programmes.
		Pioneers of Western Sociological Thought (A070501T)	The course syllabus is designed to help students to know about the classical contributions of Pioneers of Sociology. The paper will focus upon the history of

			<p>Sociology and the intellectual traditions originated during the crisis in Europe and the impact it had on the structures of society. The learner will gain theoretical as well as methodological knowledge about the subject.</p>
		<p>Research Methodology in Social Sciences (A070502T)</p>	<p>The course of Research Methodology in Social Sciences/Sociology is structured in a way that it makes student to understand and comprehend the research problems, research techniques and nevertheless course intends to develop objective as well as subjective enquiry into the areas of Sociological studies. The main purpose of the course is to develop scientific and humanistic approach towards the research work in the subject.</p>
		<p>Practical Application of Research Methodology/Project Work (A070503P)</p>	<p>Research Methodologies comprise important part in the course structure of Sociology, hence the course is designed in such a way that student will learn the basic and useful techniques of research which will be beneficial in exploring the research questions and formulation of Research Design. The student will learn how to construct schedules, questionnaire and applicability of other research methods.</p>
		<p>Pioneers of Indian Sociology (A070601T)</p>	<p>The course outline has been delineated in a manner that the student of Sociology is able to gather knowledge about the esteemed Indian Pioneers of Sociology, who largely used indigenous methodology to understand the Indian society and its complexities. The learner will be able to grasp information and knowledge about the approaches and theoretical framework adopted by the Indian Sociologists and simultaneously they will know about the History of Sociology in India and Sociological traditions.</p>

		<p>Gender & Society (A070602T)</p>	<p>This course is gender sensitive and is directed towards engaging students to learn and rethink about the gender issues. The course will introduce students to the core gender issue and will equip them to come with suggestions which would be directed towards gender equity.</p>
		<p>Field Wok/Case Study/Project Work (A070603R)</p>	<p>The syllabus is designed to introduce students to get themselves engaged in the field work and project work so that they are equipped with the practical knowledge about the field work and research project. This will be an empirical learning for those who aspire to become future Social Scientists.</p>
<p>BA (Political Science)</p>		<p>Indian National Movement & Constitution of India (A060101T)</p>	<p>The paper will help students in developing Comprehensive understanding of the Indian National Movement and the Constitution of India, emphasizing the historical struggle for independence and the establishment of a democratic framework for governance</p>
		<p>Awareness of Rights & Laws (A060102P)</p>	<p>This paper intends to arm the student with basic digital and legal awareness where by the student can leverage this in the job market. It also intends to make the student aware of his basic legal rights which would help him to stand up and help others.</p>
		<p>Political Theory & Concepts (A060201T)</p>	<p>Understanding Political theory is integral and indispensable for a comprehensive and critical study of political science. The course is designed to train a student in the foundational issues of political theory, which is relevant for any in depth study and research.</p>
		<p>Political Process in India (A060301T)</p>	<p>Study of the functioning of Indian Democratic System is essential for a comprehensive understanding of the Indian Political System. The course is designed to train& acclimatize the student with the Indian Political</p>

			System in action and explain the working relationship between citizens and state and among various units of the state. The student would be able to appreciate the trajectory of the Indian political system since independence.
		Field Work Tradition in Social Sciences (A060302P)	This paper intends to train students in carrying out empirical studies and field work which would help him in research. This would sensitize him to the precautions that is require to carry a empirical study on socially relevant topics.
		Western Political Thought (A060401T)	This course introduces the students to the ancient, medieval and modern political thinking in the West. This would help them understand the manner in which ideas pertaining to ideal state, kingship, duties of the ruler and the ruled, rights, liberty, equality, and justice have evolved over a period of time.
		Comparative Government & Politics- UK, USA, Switzerland & China (A060501T)	Politics is the mirror of the society. This paper will help the student in furthering his understanding of the world around. This would help him to appreciate other systems and make him critically analyse the pros and cons of these systems. Comparison is widely used method of scientific knowledge This would help the student to find out why a certain system is appropriate and suitable to a given society.
		Principles of Public Administration (A060502T)	Administration being essential to every organization, this course aims to acquaint a student with fundamentals of public administration to. This would provide him an insight regarding the principles of administration in general and help him to bring out the best from existing set up. This would help him to prepare for administrative examinations too.

		Public Policy Formulation & Administration in India (A060503P)	It aims to provide interface between public policy and administration in India. The essence of this paper appreciates the transition of governing philosophy into programmes and policies. Students will ab understand Political Process as well as Policy formulation process and the difficulties in implement Programmes and Policies promised in Manifestoes
		PROJECT WORK I (A060504R)	This paper intends to develop a comprehensive insight in the students so that given an opportunity they can initiate a minor research proposal or attempt a minor dissertation on their area of interest.
		Indian Political Thought (A060601T)	This course is to familiarize the students with the larger political and social thinking and ideas in Ancient, medieval and Modern India. Designed in a way to help students engage with various ideological dispensations that came to shaped the normative thinking on India.
		International Relations & Politics (A060602T)	This course seeks to equip students the basic tools for understanding international relations. It also introduces major events and developments that have shaped the contemporary international system. It aims to capture the changing dynamics of the international politics by taking up burning and relevant issues which have potential to alter its contours.
		PROJECT WORK II (A060603R)	This paper intends to develop a comprehensive insight in the students so that given an opportunity they can initiate a minor research proposal or attempt a minor dissertation on their area of interest.
BA (History)	<p>PO1- This course provides the basic ideas and concepts of History and Historical development of Humanity.</p> <p>PO2- The program has been designed to develop</p>	Ancient and Early Medieval India-Till 1206 A.D. (A050101T)	The present course will be useful in providing historical knowledge to the students. It has been constructed in such a way that a student will not only gain knowledge of ancient civilizations of India, but

	<p>historical outlook to resolve the day-to-day life struggles in the society and nation.</p> <p>PO3- Designed to enhance the capacity of students to understand universal and domain-specific values in History.</p> <p>PO4- This course intends to orient the learner with the Approaches to the broader discipline of History.</p> <p>PO5- Develop the ability to address the complexities and interface among of self, societal, national and international priorities.</p> <p>PO6- Promote research, innovation and design (Map and Atlas) development favouring all the disciplines in History.</p> <p>PO7- This programme develops scientific and practical approach among the students which helps in their day-to-day life.</p> <p>PO8- It will help in developing analytical and critical thinking based on the themes and issues of history. v</p> <p>PO9- It will help in understanding of the basic concepts of History and an awareness of the emerging areas of the field.</p> <p>PO10- Acquisition of in-depth understanding of the applied aspects of History as well as interdisciplinary subjects in everyday life.</p> <p>PO11- The programme orients students with traditional historical knowledge along with advance contemporary skills like role of remote sensing, Carbon dating and GIS in the field of history and archaeology.</p> <p>PO12- Improvement of critical thinking and skills facilitating.</p> <p>PO13- Inculcate generic and subject-specific skills to succeed in the employment market and standards of life</p>		<p>historical development can be understood easily. Students will be familiar with the political and cultural development of ancient India. The art, culture and philosophy of religion of ancient India have been included in the syllabus. Through this paper a student will get acquainted with historical facts, acquire knowledge of ancient pride of India and develop a positive attitude towards history. This approach will motivate the students to contribute towards nation building by making them aware of the social culture of India. This course will develop the logical ability of students to do a rational analysis of historical events and develop students' research aptitude. The course presented will inspire the ability of knowledge generation in the students. This section studies the political situation in North India. Students can gain knowledge of how political decentralization arose in North India after death of Harsha and which historical circumstances proved helpful in the origin of Rajput's. It also includes the history of the dynasties of Kashmir, Punjab and Sindh. This section gives a historical account of new political conditions and conflicts in India after 1000 AD. Students can gain historical knowledge of political and strategic weakness of India through political conflicts. In this paper, a student will get knowledge of the nature of Muslim attacks and the struggle of Rajput's.</p>
		<p>History of Medieval India-1206 A.D - 1757 A.D (A050201T)</p>	<p>This paper is designed to develop the understanding of India with the advent of Turks Timurs, Afghans and subsequently the establishment of Mughal rule in some parts of India. An emphasis has been laid to cover the regions of India not under the domination of</p>

			Turks and Mughals in India. This paper covers the territorial expansion of various Indian Kings and impact of Medievalism on Indian society and culture.
		History of Modern India- 1757 A.D – 1857 A.D (A050301T)	This paper is designed to cover the era of Indian history witnesses the transfer of power from Mughals, other provincial important dynasties to East India Company. It covers the study of Indian resistance at various levels and finally culminates in the First War of Independence. This is an important era of Indian History, as it witnesses the rise of indigenous powers like Marathas and Sikh State, along with new regional identities. This paper covers also the colonial land revenue system and Indian Renaissance.
		History of Modern India- 1857A.D – 1950 A.D (A050401T)	The course is designed to provide an overview of modern Indian political history and key concepts of the modern constitutional development to the students. The paper covers the history of British educational and agricultural policy with their impact over India. This paper also covers the development of communalism in India and mergers of Princely states after Independence.
		Nationalism in India (A050501T)	Acquaintance to Indian National Movement is indispensable for a student to make a sense of Indian Modern History and Nationalism. The course is designed to provide an overview of Indian freedom Struggle and key concepts of the Indian Nationalism to the students, which would evolve them into a conscientious citizen. The paper covers the history of Freedom Movement in a manner that each section, which played a vital role in independence of the country is introduced to the student.

		<p>History of Modern world-1453 A.D – 1815A.D (A050502T) (Optional)</p>	<p>This paper is designed to develop the understanding of Modern Europe from a theocratic society to modern Nation-State system. Renaissance and its aftermaths on European society, economy, polity and culture and above all breaking of Roman Catholic Church leading to subsequent development of NationState and emergence of new ideologies culminating in the form of French Revolution which is supposed to be the last nail in the Medieval coffins and first cradle of Modern Times in European context. This paper covers the Napoleon era in Europe also.</p>
		<p>Social and Economic History of Medieval India-1200A.D- 1700 A.D (A050503T) (Optional)</p>	<p>This paper comprises social, economic and cultural aspect of medieval India. In this paper a student will be introduced to the saints of medieval India who had shown the path of Bhakti movement and flourish the Indian culture and religion during Turk and Mughal attacks. It covers also the condition of women in medieval Indian history. In spite of Turk, Timur, Mughal and Afghan attacks Indian economy had a lion's share in all over world's economy, this aspect will also be known to the scholars of history.</p>
		<p>Ethics in History A050504T (Optional)</p>	<p>History is in an excellent position to inculcate moral values in students' mind. Study of Ved and Geeta with Life stories of great saints, heroes and reformers, like Shankaracharya, Buddha, Rama Maharana Pratap, Guru Nanak, Swami Dayananda, Swami Vivekananda, Mahatma Gandhi, Aurobindo and Radhakrishnan etc. encourage students to be truthful, courageous, just and selfless.</p>
		<p>Research Methodology, Tour and Study of Maps (A050501R)</p>	<p>Students will be able to understand CO1- In-depth knowledge of research methodology. CO2- The variation among Historical locations.</p>

			<p>CO3- Interaction with people with different natural and cultural settings.</p> <p>CO4- Study of Historical area being visited.</p> <p>CO5- Learn to prepare tour report</p>
		Era of Gandhi and Mass Movement (A050601T)	<p>This paper is designed to introduce the student regarding the Gandhian Philosophy, his tools and techniques which laid a mass movement in India. This paper covers rise of revolutionary movement and Gandhian programs that guided the path of Indian National Movement in twentieth century. It concludes with the vital role of 'Neta ji' Subhash Chandra Bose in the National Movement.</p>
		History of Modern world-1815A.D-1945A.D (A050602T) (Optional)	<p>This paper is designed to introduce the student regarding rapid changes which occurred in Europe. Special emphasis is laid on the positioning of Nationalities and the rise of new order defying the traditional theory of kingship. This is era of new ideologies leading to the First World War to which a student of history must be introduced with. This paper covers the history of Modern World between the two World Wars. This is an era when there is shift from Euro-centric history of world history. These turbulent times witnessed the rise of Totalitarianism as an alternative to democratic and liberal ideal, as Second World War was lesser Imperialistic clash and more a clash of two ideologies. This period also witnesses the formation of International Agencies and above all in the same period Colonist and Imperialist structure crumbled.</p>
		Social and Economic History of Early Modern India-1700A.D- 1900	<p>This paper comprises social, economic and cultural aspect of modern India. In this paper a student will be introduced to the social and religious reformation</p>

		A.D (A050603T) (Optional)	movement in colonial India. Decline of Indian Handicraft, land revenue system and commercialization of agriculture are the salient feature of 18th and 19th Century India. Development of banking and Railway had played a vital role in the drain of Indian wealth to England. All these aspects have been covered under this paper title.
		History and its Professional Utility (A050604T) (Optional)	This paper is designed to introduce application of history among students of history. Different units are designed about use of Archives, Museums and Libraries. History and its professional utility is the central idea behind this paper. This paper covers environmental aspect of history as well as historical survey of development of science and technology in India.
		Study of Languages used in Indian History (A050601R)	Students will be able to understand CO1- In-depth knowledge of Languages used in Indian History. CO2- The variation among Historical aspect of different languages. CO3- Interaction with people with different languages and cultural settings. CO4- Study of Historical area of different languages being visited. CO5- Learn to prepare language analysis report.
BA (Hindi)	PO1- Students will learn the basics of Hindi Literature & Language within the Indian tradition of knowledge. PO2- Basic forms of literature, various genres, professional forms of Hindi, etc. will be taught. PO3- Employability skills will be gained in Hindi, the most popular scientific language of India.	Hindi Poetry (A010101T)	To give information about the poetry of representative poets of Hindi and introducing scholars to history of Hindi Poetry by giving information to make aware about development.

	<p>PO4- Development of understanding in the study of language, literature and culture.</p> <p>PO5- Students will develop a sense of nationalism and moral character.</p> <p>PO6- Students will be taught to face challenges of new society through computer, cinema and translation.</p>		
		Office, Hindi & Computer (A010201T)	To provide basic information about office functioning to Hindi students so that he can facilitate the work of the office and to give basic knowledge and make it possible to use Hindi language on its basis so that they can get employment by being able to work at workplace.
		Hindi Prose (A010301T)	To provide proper knowledge of all the aspects of Hindi culture to the students of Hindi and to introduce students to important writers of novelists, story writers, playwrights and monologues, essays and other poetic genres so that interested students can make a career in this field.
		Hindi Translation (A010401T)	They provide basic knowledge of Hindi as well as English to the students to be able to adjust to the global environment and to help in dissemination of Indian culture and literature.
		Literature and Hindi Criticism (A010501T)	The study of this course provides the meaning, importance and students can become familiar with his subject matter and the Indian literature as a form of Hindi criticism and the various forms and directions of modern development of educational literature.
		Hindi National Poetry (A010502T)	To inculcate love for the nation among the students through the creation of poetry rooted in the national consciousness of Hindi.

		Linguistics, Hindi language and Devanagari script (A010601T)	Students will get information about the origin and development of parts of the language, Hindi language and the form of Devanagari script and to acquaint students with the scientific and scientific knowledge of Hindi.
		Folk literature and Folk Culture (A010602T)	To acquaint students with the important contribution of literature produced by Jan Shruti in Indian culture and to make students aware of the development of folk culture.
B.A. (Urdu)	<p>PO1- To develop Urdu linguistic, writing skills as well as passion for studies in students.</p> <p>PO2- Practicing forgiveness in simple language and developing proficiency in writing and speaking.</p> <p>PO3- Correct pronunciation, correct spelling and awareness of tense and accent.</p> <p>PO4- To draw attention to the possibilities of learning, reading and employment of Urdu through computers and to impart practical experience of computers with Urdu to students.</p> <p>PO5- To expose the art of journalism, Urdu Journalism and translation.</p> <p>PO6- To expose to Urdu culture, ethics and values as well as common Indian culture. To shape their character and to shape their minds according to the demands and requirements of their times. To make them profitable and useful for the society, the country and the human community.</p> <p>PO7- To create positive and constructive thinking in them through language and literature.</p>	Urdu Zaban-O- Adab ki Tareekh aur Qawaid-O- Insha (A030101T)	<p>CO1- To familiarize with language and knowledge of language.</p> <p>CO2- To provide knowledge of various sources and sources of Indian languages so that the unity of languages can be known.</p> <p>CO3- To familiarize with the different theories of the birth of Urdu language.</p> <p>CO4- To familiarize with the relationship of Urdu language with various Indian language and their derivation and usage.</p> <p>CO5- To enlighten about Urdu Poetry and Literature promoted in different primary schools and centres.</p> <p>CO6- To acquaint the literature developed under the influence of major literary movements and trends.</p> <p>CO7- Introduction and knowledge of important genres of poetry and prose.</p> <p>CO8- To provide basic knowledge of Urdu Qawaid-o- Insha</p> <p>CO9- To introduce knowledge and innovation.</p> <p>CO10- To acquaint with the methods and rules and regulations of letter writing, essay writing and application writing.</p>

		<p style="text-align: center;">Urdu Zaban aur Computer (AO30201T)</p>	<p>CO1- To provide knowledge about the importance and usefulness of Urdu language in the present era. CO2- Benefits of learning computer through Urdu language CO3- To impart basic computer knowledge. CO4- To introduce practical computer experience and learning methods. CO5- To impart basic knowledge through computer so as to get employment opportunities. CO6-To familiarize with different and useful websites of Urdu through computer. CO7- To provide knowledge and mastery of computer basics by imparting. CO8- To introduce the modern advantages of computers.</p>
		<p style="text-align: center;">Sahafat Aur Tarjuma Nigarika Fun Aur Riwayat (AO30301T)</p>	<p>CO1- Journalism and translation is an art and in view of the contemporary requirements to familiarize the student with this art. CO2- Translation acts as a bridge between the two. Through translation we get to know the knowledge and literary treasures of other languages. So the students have to be guided in this field. CO3- What is the art of translation? What is its definition? To expose the student to it. CO4- To inform about the basic of journalism and translation as well as its types and rules and regulations. CO5- Students should be introduced to modern languages through translation. It has to develop the ability to write and speak in other languages.</p>

			<p>CO6- What is the usefulness of journalism and translation in any language, what are its goals? To enlighten the possibilities and objectives of this field.</p> <p>CO7- Especially to provide practical exercises and lessons in English to Urdu, Urdu to English and likewise Hindi to Urdu and Urdu to Hindi translation so that they can use it in practical life</p> <p>CO8- The usefulness of journalism and translation is established in every era and its is also an important source of employment. Therefore, from this point of view, it is intended to train and guide the students.</p>
		<p>Urdu Afsana Aur Drama (AO30401T)</p>	<p>CO1- To understand Mythology- Meaning and its Introduction.</p> <p>CO2- To acquaint the students with the western and eastern tradition of fiction writing.</p> <p>CO3- To acquaint with the life and legendary services of important Urdu Fiction writers.</p> <p>CO4- To familiarize students with the literature of fiction included in this lesson, along with methods of analysis and critical study and to model practical criticism.</p> <p>CO5- To introduce the meaning, connotation and types of drama with different components.</p> <p>CO6- To acquaint with the tradition of drama in India apart from the western tradition.</p> <p>CO7- To familiarize with the tradition of drama in Urdu.</p> <p>CO8- To study major Urdu dramatists along with their lives.</p> <p>CO9- To introduce the technical merits and demerits of the dramas included in this lesson along with the</p>

			subject and to develop the skills of analysis and criticism.
		Urdu Ghazal Aur Nazm (A030501T)	<p>CO1- To throw light on the gender status of ghazal.</p> <p>CO2- To introduce the Arabic and Persian tradition of Ghazal.</p> <p>CO3- To familiarize with the tradition of Urdu Ghazal</p> <p>CO4- To bring to light the universal popularity of Ghazal.</p> <p>CO5- Ghazal has played an important role in creating harmony and unity and consensus among the people in India's freedom struggle, so to make the students aware of the historical role of Ghazal by exposing them to their realities.</p> <p>CO6- To inform about the ancient history of Urdu poetry with Ghazal.</p> <p>CO7- To make familiar with the gender difference of Ghazal and poem.</p> <p>CO8- To enlighten the tradition of urdu poetry.</p> <p>CO9- To acquaint the students with the poetry of different periods and poets of different places and the themes and artistic and intellectual qualities of their poems.</p> <p>CO10- Urdu poetry has played an important role in the freedom struggle with public awareness. Apart from this, it has also played a significant role in promoting national unity. Through this paper, students will be aware of the historical role of the poem. And the roots of national unity will be strong within them and they will be able to play their part in the development of the country.</p>

		<p style="text-align: center;">Qasida, Marsiya and Masnavi (A030602T)</p>	<p>CO1- Classical genres of Urdu will be studied. CO2- Qaseedah is the oldest form of Arabic poetry. To acquaint the students with Genre Qaseedah completely. CO3- Apart from the art and structure of Qaseedah, to familiarize with its tradition in Arabic- Persian and especially in Urdu. CO4- Marsiya h is also the oldest genre of speech in Urdu. To provide knowledge of this genre to students. CO5- To introduce the art of mourning and its evolution from era to era. CO6- To bring to light the personality and speech of important Urdu elegiac writers and to identify its cultural value and Indian elements in it. CO7- Masnavi is also a popular poetic narrative genre of Urdu. CO8- To highlight the gender and artistic importance of this genre and to introduce its tradition in Urdu. CO9- To expose the students to the life of important writers of Urdu Masnavi and the virtues of their words and the moral, cultural and social aspects hidden in them so that they can understand the Indian values of the past through Urdu Mashari.</p>
		<p style="text-align: center;">Urdu Novel (A030602T)</p>	<p>CO1- To expose the students to the gender status of the novel. CO2- Comparison with other genres of fiction. CO3- Acquaintance with the tradition of the novel. CO4- The Urdu Novel has wrapped the Indian civilization and culture very beautifully. Therefore, the purpose of this paper is to make students aware off this culture.</p>

			<p>CO5- Urdu novel has also played an important role in our freedom movement. Therefore, it is desirable to familiarize the students with this character of the novel.</p> <p>CO6- The novel contains all the facts of our life. Therefore, through the novel, students should be taught the skills of life science so that it proves beneficial from the society.</p>
		<p>Urdu Adab aur Tahzeeb - O- Saqafat (A030601T)</p>	<p>CO1- Indian civilization is the oldest civilization in the world. To expose the students to Indian culture.</p> <p>CO2- To introduce students to the living elements of Indian civilization and culture in Urdu language.</p> <p>CO3- To inform about the hidden Indian civilization and culture in Urdu poetry</p> <p>CO4- To inform about the current elements of Indian civilization and culture in Urdu prose, especially stories, short stories and novels.</p>
		<p>Mirza Ghalib (A030602T)</p>	<p>CO1- To provide complete awareness to the students about Mirza Ghalib.</p> <p>CO2- To enlighten the position and status of Mirza Ghalib.</p> <p>CO3- To familiarize with Mirza Ghalib's Prese, especially the letter writing.</p> <p>CO4- Rediscovering the civilization of India with reference to the literature of Mirza Ghalib.</p>
		<p>Sir Syed Ahmad Khan (A030602T)</p>	<p>CO1- To acquaint the students with sir Syed's life and his literary and academic achievements.</p> <p>CO2- To introduce the students to the reforms that sir Syed tried to create in the field of reform and education through his Aligarh movement in building a modern Hindustan.</p>

			<p>CO3- Sir Syed played a significant role in the development of country with the help of Urdu language. It is necessary to inform the students so that they also have the spirit of building and developing the country.</p> <p>CO4- To make students aware of the way in which Urdu literature, especially prose, has been adapted to modern thought and contemporary requirement and to encourage them to take practical action.</p> <p>CO5- Sir Syed made Urdu literature as a means of creating love and unity among Indians, so making the students aware of his achievements and preparing them to develop the same spirit through language and literature.</p>
		<p>Allama Iqbal (A030602T)</p>	<p>CO1- Iqbal is an important and revolutionary poet of Urdu. Iqbal raised the tone of the greatness of the east through his poetry and literature in undivided India. To acquaint the students with this important aspect.</p> <p>CO2- Iqbal's poetry has a constructive basis. To make the students mindful of the ideas of national development implied in the poetry.</p> <p>CO3- Along with the construction of caste, Iqbal has also called for the conquest of the universe with great intensity in his poetry. It is to inculcate the spirit of cosmology with self- awareness in the students through their words so that they can be useful for the country and the world.</p> <p>CO4- Iqbal used poetry as a medium to create love and compassion in mankind. To mature the sprit of brotherhood and love among the students with the observance of human values through his words.</p>

		Prem Chand (A030602T)	<p>CO1- To introduce the common heritage of Premchand's Urdu – Hindi Language and literature.</p> <p>CO2- To create familiarity with Indian civilization with reference to Prem Chand Writings.</p> <p>CO3- Awareness of basic problems of farmers and common man.</p> <p>CO4- Through the literature of Premchand, one will get acquainted with the problems of rural life.</p> <p>CO5- To create empathy towards the lives of the middle and lower classes of India, their sufferings and their innocence.</p> <p>CO6- To familiarize with agriculture and the basic human problems associated with it.</p> <p>CO7- To realize the struggle of Indians against the imperial system.</p>
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