

## COURSE OUTCOMES OF UG/PG PROGRAMS

Session 2020-21

Criterion II

2.6.1

	Course Outcomes of Computer Science (Part of	
	B.Sc. Program) SEMESTER - 1	
	SEWIESTER - 1	
Paper-1	C Programming	
CO1	Able to understand and develop well-structured programs using C language.	
CO2	Able to understand the concept of problem solving and expression of solution through flow chart and algorithm.	
CO3	Able to use the concept of different memory allocation methods.	
CO4	Can Classify the various parts of program -data types , variables ,operators , conditional & looping statements ,functions , Pointers , Arrays, File handling.	
Paper-2	Computer Fundamentals	
CO1	Understand the meaning and basic components of computer system.	
CO2	Can distinguish hardware and software components of computer systems.	
CO3	Can describe various generations of computer systems.	
CO4	Able to identify the various input and output units and their purpose.	
	SEMESTER - 2	
Paper-1	Programming in C++	
CO1	Able to understand the concept of Object oriented design & program implementation.	

CO2	Able to use the concept of constructor and destructor, operator overloading.
CO3	Able to apply the knowledge of Inheritance and its types.
CO4	Able to describe the type of Exception handling methods.
Paper-2	System Analysis and Design
CO1	Able to describe the organizational and business context of systems development.
CO2	Learn to explain and apply system development methodologies, model, tools and techniques for developing quality software.
CO3	Learn to describe, organize and structure the components of system, including decisions about the system's hardware, software and network environment.
CO4	Learn about implementation, software testing, and deployment issues.
	SEMESTER - 3
Paper-1	Data Structures
CO1	Analyze algorithms correctness
CO2	Use searching and sorting techniques
СОЗ	Describe the concept of stack, queue and linked lists operations
CO4	Apply the knowledge of tree and graphs concepts

Paper-2	Operating System
CO1	Understand the concept of Operating System.
CO2	Perform the analysis of performance comparison and understand the concept of deadlock and determine the solution of it.
CO3	Describe the various memory management techniques.
CO4	Classify various file allocation methods and able to use the concept of protection mechanism.
	SEMESTER - 4
Paper-1	Programming in Java
CO1	Understand the concept of Java programming.
CO2	Apply the knowledge of programming constructs.
CO3	Discuss the various packages, applets, threads and exception handling.
CO4	Perform the analysis of event driven java programming with graphics and controls using AWT tool kit.
Paper-2	Lunux Operating Sysems
CO1	Understand the concept of Linux Operating System its file structure and shell.
CO2	Discuss the various basic commands.

СОЗ	Understand the working of vi editor.	
CO4	Manage user accounts, changing password and access to the files.	
	SEMESTER - 5	
Paper-1	VB Programming	
CO1	Understand the working and basic of VB programming language.	
CO2	Understand the concept of learn concept of arrays, procedures, functions and modules.	
СО3	Apply the knowledge of designing menus and database using built in tools.	
CO4	Explain the types of Database handling and Error handling.	
Paper-2	Database Management Systems	
CO1	Understand the concept of basic of DBMS.	
CO2	Perform the analysis of working with ER models.	
СОЗ	Understand the working of relational model.	
CO4	Describe the type of functional dependancy and normalization	
	SEMESTER - 6	
Paper-1	Compilier Constructions	

CO1	Understand the working principle of Compiler design.
CO2	Understand the working of Top - down & Bottom - up parsing techniques.
CO3	Able to apply the knowledge of algorithms and implementation techniques for type-checking, code-generation and optimization.
CO4	Classify the various internal form of source program-semantic analysis, symbol tables, error detection and recovery and directed acyclic graph.
Paper-2	SQL /PL/SQL
CO1	Understand the working principles of Codd rules, DDL,DML,TCL.
CO2	Use the concept of views and programming constructs.
CO3	Explain the types of Exception handling and procedures cursors
CO4	Discuss the various functions and triggers

	Course outcome (B. Sc. Chemistry)	
	Semester – I	
Ch-101:	Paper – I (Inorganic Chemistry)	
CO1:	To enable students to know and understand about the basic concept regarding structure of atoms, ions subatomic particles and properties of different elements with reference to ionization energy, metallic and non-metallic characteristics of different elements present in modern periodic table.	
CO2:	To enable students to understand chemical bonding concept and predict molecular geometry.	
CO3:	To make students to understand the concept of S-Block elements and noble gases.	
CO4:	To enable students to know about various concept regarding P-Block elements and Food Adulteration their detection	
	Ch-102: Paper – II (Physical Chemistry)	
CO 1:	To enable students to know about Thermodynamics and Thermochemistry.	
CO2:	To enable students to know about the basic concept regarding Gaseous State	
CO3:	To enable students to know about liquid crystals, properties of liquids, their determination and applications.	
CO4:	To make students to understand the properties of Colloidal State and Surface Chemistry.	
	Ch-103: Laboratory Course.	

CO 1:	(i) To enable students to know essential facts, concepts and principles in the analysis of radicals.
	(ii) To enable students to gain the knowledge regarding the identification and separation of various adulterant present in food items.

CO2:	To enable students to gain skill in monitoring by observation and measurements of chemical and physical properties.	
	Semester – II	
	Ch-201: Paper – I (Inorganic Chemistry)	
CO 1:	To enable students to know about hybridization and reactivity along with mechanisms for organic reaction.	
CO2:	To make students to understand about the orientation and reactivity of organic reactions.	
CO3:	To enable students to know the methods of preparations of compounds and their applications in different fields of science and medicine.	
CO4:	To enable students to gain knowledge of unsaturated hydrocarbons and reactivity to explain addition and substitution reactions.	
	Ch-202: Paper – II (Physical Chemistry)	
CO1:	To enable students to know maximum conversion of heat into work, change in free energy entropy and criteria of spontaneity.	
CO2:	To enable students to know about phases, components and degrees of freedom of system their properties and applications.	
CO3:	To enable students to know about the conductance, its variation with dilution and the determination of conductance with different methods.	

CO4:	To enable students to know about the velocity of chemical reaction of different types and the theories related to it.
CH-203: Laboratory Course	
CO1:	To enable students to know the characteristics of organic compounds and their identification.

CO2:	To enable students to know the relationship of various thermodynamic parameters and their relationship to electrophiles and nucleophiles.	
B.ScII . Semester-III		
CH-301: Paper-I (Inorganic Chemistry)		
CO1:	To make students to gain knowledge about general information and properties of molecular orbitals and synthesis of tetra nitride and poly halides compounds.	
CO2:	To enable students to know about general information and properties of I,II and III transition series members.	
CO3:	To enable students to know about chemical properties of Lanthanides and Actinides elements.	
CO4:	To enable students to know about the quantitative assessment of scientific data.	
	CH-302: Paper- II (Organic Chemistry)	
CO1:	To enable students to know about the structural, chemical and physical properties of different organic halides	
CO2:	To enable students to know about the structural, synthesis, chemical and physical properties along with classification of alcohols and phenols	

CO3:	To enable students to know about the structural, chemical and physical properties of aldehydes and ketones.
CO4:	To enable students to know about the structural, chemical and physical properties of carboxylic acids and its derivatives
CH- 303: Laboratory Course	
CO1:	To enable students to know about quantitative analysis by volumetric methods and able to learn the applications of types of titrations and To Study and investigate the physicochemical properties of Soil

CO2:	To enable students to know about the steps involved in the identification of organic compounds	
	B.Sc. –II , Semester – IV	
	CH – 401:Paper- I (Inorganic Chemistry)	
CO1:	To enable students to understand about the different types of coordination compounds and its various aspects.	
CO2:	To enable students to know about isomerism in coordination compounds and able to recognize and understand various redox reactions.	
CO3:	To enable students to understand the basic concept regarding Colorimetry and Spectrophotometry along with various separation techniques.	
CO4:	To enable students to know about the basic concept regarding Inorganic Polymer and Water Analysis.	
	CH – 402: Paper- II (Physical Chemistry)	
CO1:	To enable students to understand about basic idea regarding physico chemical identification of a crystal structure.	

CO2:	To make students to gain knowledge of Electrochemistry through various laws and theories.	
CO3:	To enable students to understand about the various types of spectra, rotational , vibrational and electronic energy levels	
CO4:	To enable students to understand the concept regarding Quantum Chemistry and Dielectric and Magnetic Properties of molecules.	
	CH-403: Laboratory Course	
CO1:	To enable students to understand synthesis of various complexes and basic knowledge of separation of binary mixturesusing chromatography technique.	
	Also to enhance the student's knowledge regarding physicochemical analysis of water	

CO2:	To enable students to understand various types of titrations like conductometric and potentiometric titration.		
	B.Sc. –III, Semester – V		
	CH- 501:Paper- I (Organic Chemistry)		
CO1:	To enable students tounderstand about various types of nitrogen, its derivatives, synthesis; and their properties.		
CO2:	To enable students toknow about the synthesis and chemical properties of various heterocyclic compounds.		
CO3:	To enable students to gain information about various quantitative analytical methods and various organometallic compounds.		
CO4:	To enable students tounderstand various aspects, laws and applications of spectroscopic methods		
	CH- 502:Paper- II ( Physical Chemistry)		
CO1:	To enable students to understand about the various aspects of quantum chemistry, and it's various theories.		
CO2:	To understand about the various aspects of quantum chemistry, atomic orbital and its various theories along with applications.		
CO3:	To enable students to understand about different properties and theories related solution. They will also get the knowledge about magnetic properties, its measurements.		
CO4:	To enable students to understand about basic concept of photochemistry and Raman spectra.		
	CH-503: Laboratory Course		

CO1:	To enable students to understand about the estimation of various organic compounds using different methods.
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CO2:	To enable students to understand about the various applications' of laws related to physical parameters and their verifications.	
	B.Sc-III, Semester –VI	
	CH-601: Paper-I (Inorganic Chemistry)	
CO1:	To enable students to understand about interaction of metal complexes with various ligands and their electronic spectra.	
CO2:	To enable students to understand about the magnetic, thermodynamic and kinetic parameters of metal complexes.	
CO3:	To enable students to understand about the various application of spectroscopic and separation techniques like chromatography, ion-exchange and solvent extraction methods.	
<b>CO4:</b>	To enable students to understand about the inorganic polymers their types, synthesis and properties.	
	CH- 602: Paper- II ( Organic Chemistry)	
CO1:	To enable students to understand about the various aspects NMR and its applications.	
<b>CO2:</b>	To enable students to understand about organic synthesis and carbohydrates it's types and properties.	
CO3:	To enable students to gain an understanding about amino acids, peptides, proteins, nucleic acids, fats, oils and detergents	
<b>CO4:</b>	To enable students to gain an understanding about synthetic dyes, drugs and polymers.	
	CH-603: Laboratory Course	

CO1: To enable	ble students to gain the knowledge about synthesis of various complexes and study their properties using various methods.

CO2:
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Course Outcomes of Physics (Part of B.Sc. Program)		
	SEMESTER - 1	
Paper-1		
CO1	In this semester the student will be able to learn the basics of elastic properties of materials their applications in bridges, beams and cantilevers.	
CO2	Properties of fluids like viscosity which effect the motion of aircraft if the medium is air, the lubrication of machineries if the medium is liquid.	
CO3	Properties like Surface Tension which has application in daily life like soap solutions for better washing, why some liquids wet containers while other liquids do not wet.	
CO4	Mechanics chapter will teach a student application like rocket propulsion, motion of bodies, rotation of bodies.	
Paper-2		
CO1	Interaction of charges, different governing laws and basics of electric fields	
CO2	Dielectric materials, capacitors, different theories related to the capacitances and Claussius Mossotti equation	
CO3	Phenomenon of Electromagnetic induction, Faradays Laws, Self and Mutual induction. Transformers and its application to various aspects of daily life.	
CO4	Electric currents especially Alternating Currents their complex form like j-operator, resonance, power factor and application of A.C circuits in daily life.	
	SEMESTER - 2	
Paper-1		
CO1	This paper enables a student to learn about oscillations, wave motion, damped oscillations.	

CO2	Simple Oscillations in different systems and Kinetic theory of gases in detail.
CO3	Transport phenomena in gases and introduction to thermodynamics
CO4	Thermodynamics in detail and applications are dealt with clarity.
Paper-2	
CO1	Theory of Gravitation, Kepler's Laws of Planetary motion and relation between G and g.
CO2	Astrophysics: Big bang theory, measuring distance of planet/star from Earth, measuring diameter of a planet if distance is known. Details of Sun and temperature of Sun and Cosmological theories of Universe.
CO3	Magnetism: Theory of magnetism, different types of magnetic materials.
CO4	Magnetostatics: Forces due to magnetic materials on different materials. Theories behind them, magnetization vector, magnetic vectors.
	SEMESTER - 3
Paper-1	
CO1	Waves in different media, human audibility, different musical instruments, theory of human ear.
CO2	Applied Acoustics: Building an echoless halls, theory behind reverberation, reproduction of sound.
CO3	Ultrasonic waves, piezoelectric effect, magnetostriction, SONAR and deep sea investigation using ultrasonic waves.
CO4	Power Supplies, rectification by diodes, filters, regulated power supply.

Paper-2		
CO1	Interference of light, reflection, refraction, transmission of light through different media.	
CO2	Diffraction of light, narrow edge, grating diffraction, theories behind the diffraction.	
CO3	Polarization of light, theory behind polarization, studies on different crystals which exhibit polarization phenomena.	
CO4	Electromagnetic waves, leading equations that support it, Poynting vector, Electromagnetic wave velocity.	
	SEMESTER - 4	
Paper-1	Paper-1	
CO1	Solid State Physics, different crystal systems, lattices, effect of different crystal structures on the properties of materials	
CO2	X-rays, applications, Interaction of X-rays with matter, Different laws governing with X-rays.	
CO3	Solid state physics, theory of diffraction of X-rays. Bragg's spectrometer	
CO4	Lasers, productions, properties, applications.	
Paper-2		
CO1	Solid State Electronics, LEDs, transistors, thermal runaways, biasing circuits.	
CO2	FETs, JFETs, MOSFETs, structure, properties and applications	

СОЗ	Molecular Physics: Spectra due to Diatomic molecules, vibration spectra, Rotation Spectra.	
CO4	Raman Spectrometer, Application of Raman Spectroscopy, NMR, ESR and other applications	
	SEMESTER - 5	
Paper-1		
CO1	Atomic Physics, Zeeman spectra, singlet, doublet, quantum numbers, selection rules	
CO2	Free electron theory, Band theory of solids, Fermi Energy, Fermi Temperature, Hall Effect	
CO3	Statistical Physics, Maxwell Boltzmann distribution, Fermi dirac Statitics.	
CO4	Black body radiation, Planck's law studies, Bose Einstein Condensation.	
Paper-2		
CO1	Quantum Mechanics, Compton Effect, Uncertainty Equation, deBroglie Hypothesis	
CO2	Shrodinger's equation, Eigen Value, Eigen Function, Application to Free particle in one and three dimensional potential box,	
CO3	Nano Materials, preparation, characterization,	
CO4	Nano Technology, BET, SEM, TEM and particle analyser, application of nano materials in various fields.	
	SEMESTER - 6	
Paper-1		

CO1	Relativity, time dilation, length contraction, Michelson Morley Expt, Mass-Energy Equivalence, Mass variation with speed of light.
CO2	Nuclear Physics, nuclear reactor, cosmic rays, elementary particles, nuclear fusion, Shell model
CO3	Alpha decay, beta decay, Gamma Radiation, Geiger Nuttal law, Magnetic spectrometer for measuring energy of Alpha particle.
CO4	Bio-Physics, EEG, ECG, Blood pressure measurement, Sonography, Electroretinogram for retina treatment, pH of blood
Paper-2	
CO1	Amplifiers, different classes of amplifiers, oscillators, applications of Amplifiers and Oscillators
CO2	Fiber Optics, fabrication, properties, application, graded index concept, losses and bandwidth
CO3	Communication: Powers and currents in modulations, AM, FM, modulation index, band width, merits and demerits.
CO4	Number Systems, decimal system, hexadecimals, octadecimals, Universal gates, OR gates, NOR gates and deMorgan Theorem

Course Outcomes of B.Sc. Mathematics		
	SEMESTER - 1	
Paper-1	M1	
CO1	Students will be able to understand the concept of rank of matrix, solution of equations using matrix.	
CO2	Student will understand the working principle of solution of cubic and bi-Quadratic equations	
CO3	Students will be able to understand DE Moivre's theorem and its applications.	
CO4	Students will be able to understand the concept if group.	
Paper-2	M2	
CO1	To make students able to apply the knowledge of limit, continuity, differentiation and Lebinits's theorem.	
CO2	Students will understand the Maclaurian, and Taylor series expansions, the application of L' Hospitals rule.	
CO3	To make students understand the concept of partial derivative and to and apply Euler's theorem.	
CO4	To unable students to handle the various methods of Integration.	
	SEMESTER - 2	
Paper-1	M3	
CO1	To make students able to know about sphere, cone, cylinder analytically.	

CO2	To describe to the students various method of solutions of first order differential equations.
CO3	To enable students to determine the solution of higher order linear differential equation.
CO4	To explain to the students the types of difference equations.
Paper-2	M4
CO1	To make students able to understand Vector Differentiation.
CO2	To enable students to understand the evaluation and application of double Integration.
СОЗ	To make students able to understand evaluation and application of triple Integration.
CO4	To make students to understand the concept of improper Integrals.
	SEMESTER - 3
Paper-1	M5
CO1	To enable the students to understand the principle of Mean Value Theorem and Taylor's Theorem.
CO2	To enable the students to understand the concept and application of Maxima and Minima of functions of two variables.
CO3	To enable the students to use the knowledge of sequences.
CO4	To enable the students to use the knowledge of series.

Paper-2	M6	
CO1	To enable the students to understand the types and properties of Bessel's and Legendre's Equations.	
CO2	To enable the students to know the working principle of Laplace Transform.	
CO3	To enable the students to determine the solution of Ordinary Differential Equations.	
CO4	To enable the students to use the concept of Normal Sub-groups, Group Homomorphism etc.	
	SEMESTER - 4	
Paper-1	M7	
CO1	To enable the students to understand and determine the solution of simultaneous differential equations.	
CO2	To enable the students to understand the concept of Lagranges Equation.	
CO3	To enable the students to determine the solution of Partial Differential Equations.	
CO4	To enable the students to understand the concept of functional.	
Paper-2	M8	
CO1	To enable the students to apply the knowledge of equilibrium of Coplanar Forces.	
CO2	To enable the students to discuss about Velocity and acceleration along given directions.	

СОЗ	To enable the students to discuss the mechanics of particle.		
CO4	To enable the students to discuss equivalent one body problem.		
	SEMESTER - 5		
Paper-1	Paper-1 M9		
CO1	To enable the students to understand the concept of Fourier Series.		
CO2	To enable the students to understand the concept of RieMann-Stieltjes Integral.		
CO3	To enable the students to get the knowledge of differentiability of complex function.		
CO4	To enable the students to explain the types of elementary function, mappings.		
Paper-2	M10		
CO1	To enable the students to understand the concept of cuntiality and metric space.		
CO2	To enable the students to get the knowledge of compactness.		
CO3	To enable the students to understand the concept of Ring.		
CO4	To enable the students to get the knowledge of working of Complex Integration.		
SEMESTER - 6			
Paper-1	M11		

CO1	To enable the students to understand the concept of Auto-morphism.
CO2	To enable the students to understand the concept of Vector Spaces.
CO3	To enable the students to get the knowledge of linear transformations
CO4	To enable the students to understand the principle of matrix associated with linear map.
Paper-2	M12
CO1	To enable the students to get the knowledge of basic principle of Relativity.
CO2	To enable the students to understand the concept of Relativistic Velocity and acceleration.
CO3	To enable the students to get knowledge of Tensors.
CO4	To enable the students to understand the concept of Relativistic Mass and Energy.

Course Outcomes of Bachelor Of Commerce (B.Com.)		
	Programme Outcomes: PO	
PO1	To build a strong foundation of knowledge in different areas of commerce.	
PO2	To develop the skill of applying concepts & techniques used in commerce	
PO3	To develop an attitude for working effectively and efficiently in business environment.	
PO4	To integrate knowledge, skill and attitude that will sustain an environment of learning and creativity among the students	
PO5	To expose students about entrepreneurship.	
PO6	To enable a student to be capable of making decisions at personal and professional level.	
	SEMESTER - 1	
Paper-1	Financial Accounting-I:	
CO1	To build a strong foundation of knowledge in different areas of accounting	
CO2	To develop the skill of applying concepts and techniques used in accounting	
CO3	To develop an attitude for working effectively and efficiently in business environment	

CO4	To integrate knowledge, skill and attitude that will sustain an environment of learning and creativity among the students
Paper-2	Business Organization:
CO1	To expose students towards Social Responsibility of Business towards different groups.
CO2	To understand the concept of Company, Classification, advantage its role in economy.
CO3	To understand the concept of business organization
CO4	To know Recent Trends in Business Organization
Paper-3	Company Law:
CO1	To make aware the students with basic concept of company law
CO2	Students will be familiar with the applicability of various laws
CO3	To understand the working of share capital and DEMAT of securities
CO4	To know the overall functioning of management of a company
Paper-4	Business Economics
CO1	To know the Role and social responsibility of business & business Economist.

CO2	To understand the concept of Theory of Consumption	
СОЗ	To apply the Theory of Production	
CO4	To now the concept of Theory of Cost and Revenue	
	SEMESTER - 2	
Paper-1	Statistics and Business Mathematics:	
C01	To make aware the students about the different types of series	
CO2	To aware the students about tabulation, classification of data	
СОЗ	Students will be made aware about the dispersion and skewness series	
CO4	Students will be equipped with calculation of ratios, percentages, simple and compound interest	
Paper-2	Business Management:	
CO1	To apply conceptual business foundations fundamentals	
CO2	To understand the Traditional and Modern techniques of planning and decision making	
СОЗ	To understand the concept and application of Delegation of Authority and Co-ordination & Controlling.	

CO4	To make aware the students about the Recent trends in management.	
Paper-3	Secretarial Practice:	
CO1	To understand the procedure of company formation and role of secretary	
CO2	To understand the role and function of secretary in an company	
СОЗ	To know the working of directors and their role	
CO4	To understand the procedure for filing and concept of e-governance	
Paper-4	Business Economics – II:	
CO1	To study the classification of markets and their structure	
CO2	To study the Perfect & Imperfect Competition Markets.	
CO3	To study the various Theories of Distribution	
CO4	To understand the concept of Business Cycles & National Income.	
	SEMESTER - 3	
Paper-1	Financial Accounting - II:	

CO1	To study the Consignment Accounts.
CO2	To understand the Branch Accounts (Excluding Foreign Branch)
CO3	To know the Flotation of Joint Stock Companies and their Capital Structure.
CO4	To prepare the Final Accounts of Joint Stock Companies.
Paper-2	Business Communication & Management:
CO1	To understand the basic concept of communication
CO2	To know the concept of customer care communication In business
CO3	To study the Technology and business communication
CO4	To learn the MS-office aided communication
Paper-3	Business Law:
CO1	To make students aware about various Laws relating to Business
CO2	To understand the various laws related to business
CO3	To understand the working of laws

CO4	To study the laws related to IT and consumers	
Paper-4	MONETARY ECONOMICS-I:	
CO1	To know the concept of Money	
CO2	To understand the concept of Inflation & Deflation	
CO3	To study the Money Market & Policies	
CO4	To know the concept of Public Finance	
	SEMESTER - 4	
Paper-1	Financial Accounting - III:	
CO1	To prepare the Final Accounts of Banking Companies	
CO2	To prepare the Final Accounts of General Insurance Companies	
CO3	To understand the concept and application of Valuation of Goodwill	
CO4	To apply the concept and steps in Liquidation of Company.	
Paper-2	Skill Development:	

CO1	To understand the concept of personality
CO2	To apply the communication skills and personality development
CO3	To study the techniques in personality development
CO4	To develop skills for entrepreneurship developmen
Paper-3	Income Tax:
CO1	To study the basic concepts of income tax
CO2	To prepare income from salary
CO3	To prepare income from house property
CO4	To prepare income from other sources and other deductions
Paper-4	MONETARY ECONOMICS-II:
CO1	To study the basic concept of commercial banking
CO2	To know the concept of e-banking and core banking
CO3	To study the banks and customers relationship and services

CO4	To know the role and functions of central bank	
	B. Com. III	
Paper-1	FINANCIAL ACCOUNTING -III:	
CO1	To prepare and understand the accounts of Amalgamation and Absorption of Companies.	
CO2	To prepare and understand the accounts of Reconstruction of Companies.	
CO3	To prepare and understand the Accounts of Holding Companies.	
CO4	To prepare and understand the Valuation of Goodwill and Valuation of Share	
CO5	To prepare and understand the Fire Insurance Claims and Accounts of Public Utility Companies.	
Paper-2	INCOME TAX AND AUDITING:	
CO1	To understand the basic concept and definition of Income Tax Act	
CO2	To acquire knowledge about Computation of Income under different heads of Income of Income Tax Act.	
CO3	To Acquire Knowledge about the submission of Income Tax Return.	
CO4	To Acquire Knowledge about Tax deducted at Source.	

CO5	To prepare income from other sources and other deductions
Paper-3	FUNCTIONAL MANAGEMENT:
CO1	To study the various Human Resource Function.
CO2	To know the basic concepts of Marketing Function
CO3	To understand the Finance Function.
CO4	To study the Production Function.
CO5	To know the basic concepts of International Business Environment.
Paper-4	INDIAN ECONOMICS:
CO1	To understand the basic concepts of Indian Economy & Planning.
CO2	To understand the basic concepts of Indian Economy & policy
CO3	To know the Indian Agriculture.
CO4	To understand the Indian Industry.
CO5	To know the India's International Trade.

Paper-5	BUSINESS FINANCE:
CO1	To study the basic concepts of Business Finance.
CO2	To study the Role and Functions of Stock Exchange and SEBI.
CO3	To know the basic concepts of Working Capital.
CO4	To know the basic concepts of Dividend Policy.
CO5	To know the basic concepts of Capital Budgeting.
Paper-6	COMPUTERIZED ACCOUNTING:
CO1	To understand the basics of Accounting.
CO2	To study the Accounting Software.
CO3	To understand the basic entries in tally.
CO4	To understand the Voucher Entry.
CO5	To understand the display in tally

Course Outcomes of Bachelor Of Business Administration (BBA)	
	SEMESTER - 1
Paper-1	ENGLISH
CO1	develop their intellectual, personal and professional abilities,
CO2	acquire the knowledge of language skills for effective communication
CO3	construct correct sentences by the usage of correct tense and part of speech
CO3	apply the knowledge of writing various business letters and business manners.
Paper-2	FUNDAMENTALS OF BUSNIESS MANAGEMENT
CO1	Understand the basic concept of management.
CO2	Use the concept of management and administration at different levels of organization,
CO3	Explain the types of plans and objectives of planning,
CO4	Understand the types of organization
Paper-3	COMPUTER APPLICATIONS FOR BUSINESS
CO1	Understand the working of computer and various operating systems,
CO2	Apply the knowledge of MS-Office-WORD, EXCEL, PPT.,

CO3	Understand the concept of e-commerce and web-page designing,
CO4	Use the concept of Business Re-engineering and IT-enabled services,
Paper-4	COST ACCOUNTING
CO1	Understand the concept of Cost and Cost accounting
CO2	Understand the applicability of process costing to avoid cost wastages,
CO3	Apply the knowledge of operating cost for rendering the services,
CO4	To use the concept of managerial costing for cost control and BEP calculation
	SEMESTER - 2
Paper-1	PRINCIPLES OF MARKETING MANAGEMENT
CO1	Understand the core concept of marketing,
CO2	Explain various types of positioning and bases of segmentation, and information system.
CO3	Understand the concept of marketing mix and consumer behavior.
CO4	Apply the knowledge of pricing methods and promotional strategies
Paper-2	FINANCIAL AND MANAGEMENT ACCOUNTING

CO1	Understand the working of accounting principles,
CO2	Understand the working & preparation of Final a/cs of Joint Stock Company with simple entries,
СОЗ	Apply the knowledge of management accounting in decision making process,
CO4	Explain the various types of budgets and budgetary control.
Paper-3	MICRO-ECONOMICS FUNDAMENTALS
CO1	Understand the concept of Micro & Macro Economics,
CO2	Understand the working of demand-supply in consumer market,
СОЗ	Explain the types of cost and laws of production function,
CO4	Classify the various market structure and determination of their price-output relationship.
Paper-4	ENGLISH
CO1	Develop their intellectual, personal and professional abilities,
CO2	Acquire the knowledge of spotting error and rewriting sentences correctly,
СОЗ	Construct correct sentences by the usage of correct tense and part of speech(advanced)
CO4	Apply the knowledge of writing various business memorandums, notices etc. and business manners.

SEMESTER - 3	
Paper-1	PRINCIPLES OF FINANCIAL MANAGEMENT
CO1	Apply the knowledge of business finance,
CO2	Describe the types of various long term and short term sources of finance
CO3	Classify various costs and leverages,
CO4	Understand the concept of working capital and its management
Paper-2	BASIC STATISTICAL TECHNIQUES
CO1	Understand the basics of statistics and its role in business,
CO2	Understand the working principle of Mean, Median and Mode,
CO3	Understand various methods of measuring dispersion,
CO4	Use the concept of Correlation and probable errors
Paper-3	EVOLUTION OF BUSINESS AND COMMERCIAL GEOGRAPHY
CO1	Understand the concept of evolution of business and industrial revolution with the impact of first world war and second world war,
CO2	Explain the concept of business in post WWII scenario,

CO3	Understand the concept of commercial geography and its relation with commerce,
CO4	To familarise the students with the concept of industries and the role of industries in economic- development.
Paper-4	ENVIRONMENT MANAGEMENT
CO1	Understand the concept of environment management and to apply the knowledge of renewable and non-renewable resources,
CO2	Explain the types of pollution, their causes, effects and solution,
CO3	Determine the solution of population explosion, causes and impact, and concept of family welfare program,
CO4	Apply knowledge of environmental ethics and need for gender equality.

Course Outcomes of Bachelor Of Computer Application (BCA)		
	SEMESTER - 1	
Paper-1	Computer Fundamentals	
CO1	Understand the meaning and basic components of computer system.	
CO2	Define and distinguish hardware and software components of computer systems.	
CO3	Gain knowledge about five generations of computer systems.	
CO4	Identify the various input and output units and their purpose.	
Paper-2	C Programming	
CO1	Understand and develop well-structured programs using C language.	
CO2	Understand the concept of problem solving and expression of solution through flowchart and algorithm.	
CO3	Able to use the concept of different memory allocation methods.	
CO4	Classify the various parts of program -data types, variables, operators, conditional & looping statements, functions, Pointers, Arrays, File handling.	
Paper-3	Statistical Methods	
CO1	Understand the concept of data collection, tabulation and classification.	
CO2	Describe various types of averages.	

CO3	Discuss the various methods of measuring dispersion.
CO4	Able to use the concept of correlation and regression.
Paper-4	Discrete Mathematics Structure- I
CO1	Understand the concept and working of propositional calculus with elementary formal logic.
CO2	Explain different types of normal forms.
CO3	Be familiar with constructing proofs.
CO4	Able to apply the knowledge of theory of inference.
Paper-5	Operating System
CO1	Understand the concept of Operating System.
CO2	Describe the various memory management techniques.
CO3	Perform the analysis of performance comparison and understand the concept of deadlock and determine the solution of it.
CO4	Discuss various methods of scheduling.
Paper-6	Office Automation
CO1	Understand the concept of Windows Operating System.

CO2	Able to use the concept and working of MS Word.
CO3	Able to apply the knowledge of MS Excel.
CO4	Able to use the concept of MS Powerpoint.
	SEMESTER-2
Paper-1	Programming in C++
CO1	Understanding of Object Oriented design & program implementation by using OO language feature.
CO2	Able to use the concept of constructor and destructor, operator overloading.
CO3	Able to apply the knowledge of Inheritance and its types.
CO4	Describe the type of Exception handling methods.
Paper-2	System Analysis & Design
CO1	Learn about the organizational and business context of systems development.
CO2	Learn to explain and apply system development methodologies, model, tools and techniques for developing quality software.
СОЗ	Learn to describe, organize and structure the components of system, including decisions about the system's hardware, software and network environment.
CO4	Learn about implementation, software testing, and deployment issues.

Paper-3	Numerical Methods
CO1	Determine the solution of algebraic transcendental equations using appropriate Numerical Methods.
CO2	Solve a differential equations using appropriate Numerical methods.
CO3	Solve a linear system of equations using appropriate Numerical methods.
CO4	Calculate a definite integral using an appropriate Numerical methods.
Paper-4	Discrete Mathematics Structure II
CO1	Understand the concept of set and describe the types of sets.
CO2	Able to explain various properties and operations on sets.
CO3	Be familiar with recurrence relations
CO4	Use the concept and apply the knowledge of graphs and trees, relations and functions
Paper-5	Linux Operating Systems
CO1	Understand the concept of Linux Operating System its file structure and shell.
CO2	Discuss the various basic commands.
CO3	Understand the working of vi editor.

CO4	Manage user accounts, changing password and access to the files.
Paper-6	E Commerce
CO1	Understand the concept of E commerce, E market and value chain models.
CO2	Use the concept of business strategies in IT age.
CO3	Understand the working principle of business to business Ecommerce.
CO4	Perform the analysis of Business to consumer E commerce.

SEMESTER - IV	
Paper-1	MATHEMATICS
CO1	Understand the concept of data collection, set operation.
CO2	Understand the working of logarithm and also able to understand concept of compound Interest.
CO3	Describe the types of Averages.
CO4	Able to apply to knowledge of probability theory.
Paper-2	BUSINESS LAW
CO1	Understand the working Principles of Indian Contract Act 1972.
CO2	Understand the concept of sale of goods Act 1930, & concept of condition and warranties.
CO3	Discuss the various types of patterns and partnership firm.
CO4	Understand the working principles of Negotiable Instruments Act 1881(I), 1881(II).
Paper-3	CORE JAVA
CO1	Understand the concept of programming language.
CO2	Understanding the concept of object oriented concepts.

CO3	Able to use the concept of writing Java Applets.		
CO4	Able to apply the knowledge for creating own components and package.		
Paper-4	PHP & MYSQL		
CO1	Understanding the concepts of basics of HTML & PHP.		
CO2	Understanding the working of control structures, loops, arrays etc.		
CO3	Able to apply the knowledge of creating web application.		
CO4	Able to use the concepts of handling files and directories with concepts of database, Mysql.		
	BCCA (PART III)		
Paper-1	BUSINESS LAW		
CO1	Understand the concept of Indian Contract Act, 1872.		
CO2	Understand the working of Indian Joint Stock Companies using Indian Joint Stock Companies Act 1956.		
CO3	Understand the working principle of Partnership Firms according to the Indian Partnership Act, 1932.		
CO4	Determine the solution of Cyber Crime by applying Cyber Law.		
Paper-2	COMPUTERIZED ACCOUNTING(TALLY)		

CO1	Understand the concept of Accounting.
CO2	Able to use the concept of ledger and groups creation by using Tally software.
CO3	Describe the types of voucher entries.
CO4	Able to apply the knowledge for creation of financial statement for performing Tally audit.
Paper-3	SOFTWARE PRODUCT AND PROJECT MANAGEMENT
CO1	Understand the concepts of project management.
CO2	Discuss the various methods of software testing.
CO3	Understand the working of risk identification and risk projection.
CO4	Determine the solution of quality management
Paper-4	FRONT END DEVELOPMENT
CO1	Able to use the concepts of windows common controls.
CO2	Understand the working of multiple document interface.
CO3	Discuss the various methods of database handling.
CO4	Understand the working principal of Active X data object and data environment.

Paper-5	DBMS & ORACLE
CO1	Describe the types of databases and database architecture.
CO2	Understand the concept of RDBMS
CO3	Explain the types of SQL commands.
CO4	Able to use the concept of programming language using SQL.

## **B.A. HISTORY**

## **CO-PROGRAM OUTCOMES**

## HISTORY OF INDIA FROM EARLIEST TIMES TO 1525

CO1:	Understand the ancient civilization i.e. Harappa & Vedic and analyze the social, political and religious changes during the period. Develop theability to understand the origin and tenets of Jainism and Buddhism.	
CO2:	Acquire knowledge about the dynasties – Maurya and Gupta. Identify the causes and effects of Muslim invasion.	
CO3:	To know about the Slave dynasty of India and analyze the different policies of Allauddin Khilji and Muhammad Bin Tughlaq.	
CO4:	Acquire knowledge about Bhakti and Sufi movement.	
HISTORY OF INDIA FROM 1526 to 1761		
CO1:	Identify the establishment of Mughal power in India.Understand the administrative reforms of Sher Shah Suri.	
CO2:	To know about the war of succession of Shahjahan and understand the relations of Aurangzeb with Bijapur and Golconda.	
CO3:	To understand the expeditions of Shivaji and his relations with Deccan powers and Mughals.	
CO4:	To analyze the Maratha war of independence and to know about Third Battle of Panipat.	

### HISTORY OF INDIA: 1764 TO 1885 A.D.

C01:	Understand rise of British power in India and analyze the policy of Lord Clive.
CO2:	Analyze the policies of Lord Wellesley, William Bentinck and Lord Dalhousie.
CO3:	Classify the socio- religious movements of India.
CO4:	Understand the administrative reforms of Lord Lytton & Lord Ripon. Analyze the causes of Indian nationalism and origin of Indian National Congress.
HISTORY	OF INDIA 1886 -1947
C01:	Understand the nature of moderates and extremists.
CO2:	Distinguish about the different freedom movements and its impacts.
CO3:	Grasp details about the development in the movement towards freedom in India.
CO4:	Evaluate the Mountbatten Plan and Indian Independence Act 1947.
MODERN	WORLD 18 <sup>th</sup> to 20 <sup>th</sup> CENTURY
CO1:	Evaluate the important revolutions of the world.
CO2:	Understand the foreign policies of Bismarck and Kaiser William II of Germany and discuss about the Eastern Question (1878 -1913).
CO3:	Discuss the causes of First World War and its impact on the world.

CO4:	Analyze the Nazism and Fascism. Discuss the causes and effects of Second World War.
CO5:	Critically analyze the World after the Second World War. To know about Globalization and its impact.

	DEPARTMENT OF ECONOMICS
	COURES OUTCOMES
	BA (PART –I)
	Semester –I
Micro Econ	omics Theory –I
CO1:	To able to understand economic concept, methods, definitions, economic law & economic problem.
CO2:	To able to understand concept of Demand & supply & its applicability.
CO3:	To able to Understand Consumer behavior in terms of utility analysis, indifference curve analysis, & consumer surplus analysis.
CO4:	To able to understand concept of production function.
	Semester –II Examination
Micro Econ	omics Theory –II
CO1:	To understand concept of cost & Revenue analysis.
CO2:	To understand the major characteristics of different market structures and the implications for the behavior of the firm.

CO3:	To understand the types of market, their existence & competition.
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CO4:	To understand the dynamics of different factors of productions & their statistics for economics.		
	BA (PART –II)		
	Semester –III		
Macro Eco	nomics Theory- I		
CO1:	To able to understand macro economics analysis & basic concepts of circular flow of economic activity.		
CO2:	To able to understand of national income.		
CO3:	To able to understand the concept of money, Quantity theory of money, concept of inflation, deflation, & monetary& fiscal policy.		
CO4:	To understand classical & Keynesian theories of output and employment, consumption function, investment multiplier & investment function.		
	BA (PART –II)		
	Semester VI-		
Macro Eco	nomics Theory- II		
CO1:	To understand concept of commercial banking system & process of credit creation by commercial banks.		
CO2:	To understand the concept of Reserve bank of India its policy & Modern Banking System.		

CO3:	To understand the concept of Indian markets like Money, Capital & Financial.
0001	

CO4:	To understand the Area of Health Economics& Concept of dispersion & its applicability.	
	BA (PART –III) Yearly Pattern	
Indian Econ	nomy development & environmental economics	
CO1:	Tounder stand the structure of Indian Economics, concept of population, & planning pattern.	
CO2:	To understand the concept of LPG & Special economic Zone.	
соз:	To understand role of agriculture in Indian economics, Indian agriculture sector, agriculture prices, marketing & Labour problem.	
CO4:	To understand industrial sector in India.	
CO5:	To understand the concept of foreign trade & new economics reforms.	
CO6:	To understand the poverty, unemployment & trade union.	
CO7:	To able to understand conceptualizing development.	
CO8:	To understand theories of economic development.	
CO9:	To understand concept of environment, climate change & causes of pollution.	
CO10:	To understand concept of an ecosystem, environment control and Human Health.	

	Department of Political Science	
	(PSO) Programme Specific Outcomes	
PS01	Students are future pillars of our country. for building a strong nation future pillars should have basic & complete knowledge of politics & political theory. Political Science caters students need in becoming a good citizen &a good politician.	
PS02	Various branches of political science such as Political Theory ,Western Political Thoughts,Indian Government & Politics, State Government & Politics , Comparative Government & Politics, International Relation, Foreign Policy & Diplomacy imparts complete knowledge of Politics, Election Process, Working, strategy of various Political Parties ,Critical Analysis of Agenda of various Political Parties by utilizing appropriate theoretical knowledge, knowledge of National & International problems .	
PS03	Students get knowledgeabout Legislature, Executive & Judiciary their working process & checks balance amongst each other.	
PSO4	Political Science studentscan critically Analyse of behaviour of public representative inside & outside the house with both clarity & precision. Key phrasing relevant to the study of the subject.	
PSO5	Political science students are able to think critically & utilize variety of theoretical knowledge& variety of Research Methodologies to understand & explain Historical & Political events &views of various Political Thinkers.	
	<u>COURSE OUTCOMES</u>	
	B.A. PART –I	
	(SEM –I Political Theory)	
CO1	To build a strong foundation of knowledge in different areas of accounting	
CO2	To develop the skill of applying concepts and techniques used in accounting	

CO3 To develop an attitude for working effectively and efficiently in business environment	
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CO4	To integrate knowledge, skill and attitude that will sustain an environment of learning and creativity among the students		
<u>Unit 1. Politic</u>	Unit 1. Political Theory & State		
CO1	Students will understand the concept stated by various Thinkers & Meaning of state elements & importance of state.		
Unit 2. Power & Authority			
CO1	Students will understand the meaning of Power& Authority stated by various thinkers.		
Unit 3. Liberty & Equality			
CO1	Students will understand the importance of Liberty& Equality for developing the personality of citizen.		
Unit 4.Rights & Justice			
CO1	Students will able to know the Right & Justice protected by the Constitution of a Nation		

## **B.A.PART-II**

## (SEM –II: Western Political Thoughts)

### ( Plato, Aristotle, J.S. Mill & Karl Marks )

<u>Unit 1.Plato</u>:

	CO1	Students will be able to understand Ideal State, Philosopher King, Theory of Justice & Thoughts on Communism	
		as explained by Greek Thinker –Plato	

#### Unit 2.Aristotle:

#### Unit .3 J.S.Mill

		Students will be able to understand the concept of Liberty, Democracy, Property & Government as explained by
		Western Thinker – J.S.Mill

#### <u>Unit 4.Karl Marks:</u>

CO	CO1	Students will be able to get the knowledge about Dialectical Materialism, Class War, Theory Surplus Value and
		also about the State as cited by a Socialist thinker Karl Marks.

#### **B.A. PART-II**

#### (SEM- III : Indian Government & Politics)

### **UNIT-1 Indian Constitution**

<b>CO1</b>	Deep knowledge is imparted to the students regarding Historical background & features of Indian Constitution and Preamble.
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#### UNIT-2 Fundamental Rights & Directive Principles of State Policy

C01	Indian citizens have got various fundamental rights.Directive Principles are the guidelines for the government.
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#### UNIT 3. President, Parliament & Prime Minister

CO1	Students get deep Knowledge of election process of parliament and various ministries they learn about the
	powers vested with the president & the Prime minister.

#### UNIT- 4 Supreme Court and Major Issues in Indian Politics:

	Students will understand the role of Supreme Court in protecting the constitutional Rights of the citizens in
CO1	reserving the right to cancelled the unconstitutional decision taken by the Government. Indian Government
	comes out with various social programmes for upliftment of financial status of the citizen.

#### **B.A.PART-II**

#### (SEM-4 : State Government & Politics)

#### **UNIT -1 Centre-State Relation and Governor**

<b>CO1</b>	Students will understand the centre state relations and the role of the Governors vis-à-vis centre state relation.

#### UNIT 2. State Legislature – Legislative Assembly & Legislative Council

	CO1	Students will able to understand the function and working process of state legislature
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#### UNIT 3. Chief Minister & High Court

	CO1	Students will understand the appointment and role of the chief minister. Similarly the students will also
		understand the appointment and role of the chief justice and high court.

#### UNIT4. Panchayat Raj& Right to information

CO1	Students will be able to understand the process of Governance in local self governing bodies under panchaytraj systems. Students will know about the importance of their valuable rights to seek information from Administrative Department.
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#### **B.A. III Year**

#### **Comparative Government & Politics**

## UNIT 1- Comparative Politics : Meaning, Nature & Scope, Importance.

CO1	Significance, Growth and Method: Major Approaches- Students will understand of comparative politics and
COI	also get knowledge of different constitution.

#### UNIT 2. Historical Legacy and Political Tradition

CO1	Students will be able to understand the history of Political System of different countries. They will also
COI	understand different political cultures in U.S.A., U.K. Swiss & China.

#### UNIT 3.- Legislature in U.K., U.S.A., Swiss & China

CO1	Students will be able to understand Legislative System of the U.K , The U.S.A., Swiss & China. They will also
CO1	understand the role of political parties and Pressure groups

## UNIT 4.- Executive and Judiciary in U.K., U.S.A., Swiss & China

CO1	Students will be able to understand the Executive and Judicial system of the countries like the U.K., the U.S.A.,
COI	Swiss & China.

#### **UNIT.5-** Political Participation and Women's Political Participation

	CO1	Students will get knowledge of Political Parties get Knowledge Political Participation in general and women's
	COI	political Participation in Particulars

## **DEPATMENT OF HOME ECONOMICS**

## COURSE OUTCOMES (CO)

# **SEMESTER 1: FAMILY RESOURCE MANAGEMENT (1T1)**

CO1:	Understand the utility of home economics in life.
CO2:	Use and improve the family resources.
CO3:	Identify the elements and principles of art and design.
CO4:	Make different types of flower arrangements.
SEMESTER 2: FAMILY RESOURCE MANAGEMENT (2T1)	
CO1:	Understand the importance of self-employment, housing principle etc
CO2:	Realize the importance of work simplification.
CO3:	Describe the rights and responsibilities of consumers.
CO4:	Make arrangement of furniture in different rooms.
SEMESTER 3: NUTRITION AND DIETETICS (3T1)	

CO1:	Understand the importance and source of macro nutrients.
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CO2:	Realize the importance of vitamins and minerals.		
CO3:	Describe the role of antioxidants.		
CO4:	Make food using different methods of cooking.		
SEMESTE	R 4: NUTRITION AND DIETETICS (4T1)		
CO1:	Understand the importance of balanced diet.		
CO2:	Realize the importance of nutritional management in common diseases.		
CO3:	Detect food adulteration.		
CO4:	Avoid malnutrition.		
SEMESTE	SEMESTER 5: CHILD DEVELOPMENT (5T1)		
CO1:	Appreciate sequential ages of development during childhood.		
CO2:	Understand the influence of heredity and environment on growth and development.		
CO3:	Describe the development of senses during babyhood		
CO4:	Describe the importance of supplementary food.		

SEMESTER 6: CHILD DEVELOPMENT (6T1)	
CO1:	Understand physical, motor and emotional development during early childhood
CO2:	Describe the stages of speech development.
CO3:	Understand the factors affecting social development.
CO4:	To take care of childhood developmental problems

M. Sc. (Physics) Program Course Outcomes (CO)			
	M. Sc. (Physics) Sem-1:		
Paper-1: N	Paper-1: Mathematical Physics:		
CO-1:	To enable students learn mathematical tools like integration and derivates		
CO-2:	To enable students for development of various laws using tools.		
СО-3:	To enable students understand functions that provide platform for laws		
CO-4:	To enable students use ring, counter and functions.		
Paper-2: Complex Variables and Numerical Analysis:			
CO-1:	To enable students understand Complex variables.		
СО-2:	To enable students study Numerical Analysis by C-programming		
CO-3:	To enable students learn about problem solving by numerial method.		
CO-4:	To enable students learn applications using numerical analysis.		
Paper-3: Electronics:			

CO-1:	To enable students learn basics of electronics.
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CO-2:	To enable students small mini projects and application of electronics.	
CO-3:	To enable students learn High speed devices, amplifiers, oscillators	
CO-4:	To enable students understand digital electronics.	
Paper-4: Electrodynamics:		
CO-1:	To enable students learn about electrostatics.	
CO-2:	To enable students learn about EM theory.	
СО-3:	To enable students learn about applications of EM theory.	
CO-4:	To enable students about the electromagnetic wave propagation in complex media.	
	M. Sc. (Physics) Sem-2:	
Paper-1: Qu	antum Mechanics-I:	
CO-1:	Enable students learn evolution of quantum mechanics.	
CO-2:	To enable students microscopic events using Quantum Mech. Tools.	
CO-3:	To enable students learn about scattering theories using QM.	

CO-4:	To enables students learn about QM tunnelling using operators.
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Paper-2: Statistical Physics:			
CO-1:	To enable students will learn statistical tools for large particle systems.		
CO-2:	To enable students know about physical phenomenon statistical treatment.		
CO-3:	To enable students know complex problems where statistical tools are necessary.		
CO-4:	To enable students learn about Bose Einstein Condensation and Brownian Motion can be studied.		
	Paper-3: Classical Mechanics:		
CO-1:	To enable students understand mechanics of particles.		
CO-2:	To enable students understand dynamics of particles & Central forces		
со-3:	To enable students understand Euler's theorem and Pseduo forces,.		
CO-4:	To enable students study Rigid Body dynamics etc.		
	Paper-4: Electrodynamics-II:		
CO-1:	To enable students learn propagation of light through different media.		
CO-2:	To enable students study effect on the electric and magnetic field.		

CO-3:	To enable students the theory of Maxwell equations.
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CO-4:	To enable students to study the application of Maxwell Equations.	
	M. Sc. (Physics) Sem-3:	
Paper-1: Qu	Paper-1: Quantum Mechanics-II:	
CO-1:	To enable students learn Perturnation Theory, Zeeman Effect.	
CO-2:	To enable study the Classical and Quantum Treatment to above effects.	
СО-3:	To enable students to learn about W. K. B. Method.	
CO-4:	To enable students study Einstein's Coefficient A and B	
Paper-2: S	Paper-2: Solid State Physics and Spectroscopy:	
CO-1:	To enable the students regarding the structure of solids in 2-D and 3-D <b>CO-CO-II</b> : To enable the students study Bonding, Defects and vacancies.	
CO-2:	To enable students study the Atomic Spectra,	
CO-3:	To enable students understand Molecular Struc. & Spectra.	
Paper-3: N	Paper-3: Materials Science-I :	
CO-1:	To enable Students learn about Phase Diagrams & Transitions in Materials.	

CO-2:
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СО-3:	To enable students undestand details about Energy devices & Batteries,	
CO-4:	To enable students to learn Energy Density, Power Density of Fuel Cells.	
Paper-4 (F	Paper-4 (Foundation Course): Nano Science and Nano Technology:	
CO-1:	To enable students learn about nano materials introduction.	
CO-2:	To enable students learn about nano sysnthesis.	
СО-3:	To enable students understand about nano material characterization	
CO-4:	To enable students learn about special nano materials and properties.	
	M. Sc. (Physics) Sem-4:	
Paper-1: N	Paper-1: Nuclear and Particle Physics:	
CO-1:	To enable students learn about theories of Nucleus, &Nuclear bonding.	
CO-2:	To enable students learn from forces inside the nucleus & Nuclear Fission.	
СО-3:	To enable study the structure and theory of Nuclear Reactors	
CO-4:	To enable students understand Classification of Elementary particles,	

Paper-2: Solid State Physics:		
CO-1:	To enable students learn about band theory band theory of solids	
CO-2:	To enable students learn about lattice dynamics.	
CO-3:	To enable students learn about Free Electron Theory.	
CO-4:	To enable students learn about Semiconductors and Superconductivity	
Paper-3: N	Paper-3: Materials Science-II:	
CO-1:	To enable Students learn more about Mechanical response of materials.	
CO-2:	To enable students understand Corrosion and Degradation of materials.	
CO-3:	To enable students learn about Synthesis of materials & processing.	
CO-4:	To enable students understand structucal characterization of materials.	
Paper-4 (F	Paper-4 (Foundation Course): Experimental Techniques in Physics:	
CO-1:	To enable students study the Radiation Sources and Detectors.	
CO-2:	To enable students understand the Structural Charectrization of materials.	
CO-3:	To enable students learn about Thermal Analysis.	

CO-4:	To enable students learn about Morphological and Spectroscopic Analysis of Materials.
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Course Outcomes of M.Sc. Mathematics		
	SEMESTER – 1	
Paper-1	ALGEBRA I	
CO1	Understand the concepts of isomorphism and automorphism of groups.	
CO2	Describe Nilpotent group, Alternating groups etc	
CO3	Explain direct product and semi direct product of groups.	
CO4	Analyze the properties of ideals and modules.	
Paper-2	REAL ANALYSIS I	
CO1	Understand the concepts of uniform convergence of a family of functions.	
CO2	Describe contraction principle, inverse function theorem and implicit function theorem.	
CO3	Explain topological manifolds.	
CO4	Identify Lie groups.	
Paper-3	TOPOLOGY I	
CO1	Understand the concepts of countable and uncountable sets.	
CO2	Describe various types of sets and their properties.	

CO3	Explain connected and compact sets.	
CO4	Describe axioms of countability and separability.	
Paper-4	LINEAR ALGEBRA AND DIFFERENTIAL EQUATIONS	
CO1	Determine the rank and eigen values of a matrix.	
CO2	Understand the concept of complex vector space.	
CO3	Determine solutions of homogeneous and non-homogeneous equations.	
CO4	Solve higher order linear equations on function spaces.	
Paper-5	INTEGRAL EQUATIONS	
CO1	Perform conversion of an equation to an integral equation.	
CO2	Find solutions of integral equations.	
СОЗ	Identify Fourier and Laplace Integral equations.	
CO4	Understand the concepts of integral transforms.	
	SEMESTER – 2	
Paper-6	ALGEBRA II	

CO1	Understand the concept spolynomial rings.
CO2	Describe irreducible polynomials and algebraically closed fields.
CO3	Explain finite field and fundamental theorem of algebra.
CO4	Analyze cyclotomic polynomials and polynomials solvable by radicals.
Paper-7	REAL ANALYSIS II
CO1	Understand the concept of measure.
CO2	Solve Lebesgue integral
CO3	Describe absolute continuity, convex functions and bounded linear functionals.
CO4	Explain concept of metric space and compact spaces.
Paper-8	TOPOLOGY II
CO1	Understand the concept of regular and normal spaces.
CO2	Explain nets and filters.
CO3	Describe product topology.
CO4	Explain concept of para compact spaces.

Paper-9	DIFFERENTIAL GEOMETRY
CO1	Understand the concept of surface and families of curves.
CO2	Explain surfaces of constant curvature.
CO3	Describe parallel surfaces.
CO4	Explain concept of compact surfaces.
Paper-10	CLASSICAL MECHANICS
CO1	Understand the concept of calculus of variation.
CO2	Explain Hamiltonian equations of motion.
CO3	Describe canonical transformations
CO4	Explain transformations and conversion theorems.
	SEMESTER – 3
Paper-11	COMPLEX ANALYSIS
CO1	Understand the concept of analytic function.
CO2	Explain power series representation of analytic functions.

СО3	Describe singularities and residues.
CO4	Explain convex functions.
Paper-12	FUNCTIONAL ANALYSIS
CO1	Understand the concept of normed spaces.
CO2	Explain inner product space.
CO3	Describe Hilbert and reflexive spaces.
CO4	Explain strong and weak convergence.
Paper-13	MATHEMATICAL METHODS
CO1	Understand the concept of Fourier transforms.
CO2	Solve Laplace transforms.
CO3	Calculate finite Fourier transforms.
CO4	Explain Legendre and Mellin transforms
Paper-14	CORE ELECTIVE PAPER (GENERAL RELATIVITY)
CO1	Understand the concept of tensor.

CO2	Explain principle of covariance and equivalence.
CO3	Describe planetary orbit.
CO4	Understand field equations.
Paper-15	CORE SUBJECT CENTRIC PAPER (OPERATION RESEARCH I)
CO1	Solve problems using Simplex method.
CO2	Explain Transportation and assignment problems.
CO3	Describe Games with strategies.
CO4	Demonstrate dynamic programming
	SEMESTER – 4
Paper-16	DYNAMICAL SYSTEMS
CO1	Understand the concept of flow of a differential equation.
CO2	Explain sinks and stability.
CO3	Describe local section and flow boxes.
CO4	Describe persistence of equilibria and closed orbits.

Paper-17	PARTIAL DIFFERENTIAL EQUATIONS
CO1	Understand the concept of partial differential equation.
CO2	Explain potential theory and elliptical differential equation.
CO3	Solve diffusion and parabolic differential equations.
CO4	Describe wave equation.
Paper-18	NUMERICAL ANALYSIS
CO1	Apply different methods to find approximate solution of equations.
CO2	Explain interpolation methods.
CO3	Describe minimax and least square approximation problem.
CO4	Apply trapezoidal and Simpsons rule.
Paper-19	CORE ELECTIVE PAPER (COSMOLOGY)
CO1	Understand the static cosmological models.
CO2	Explain various cosmological principles.
СОЗ	Describe flat, closed and open universe.

CO4	Understand how distance is calculated in universe.
Paper-20	CORE CENTRIC PAPER (OPERATION RESEARCH II)
CO1	Understand integer programming.
CO2	Explain queuing theory.
CO3	Describe non-linear programing.
CO4	Understand quadratic, fraction and global programming.

M. Sc. Program outcomes		
	M.Sc. Chemistry Semester I CH-101: Paper I (Inorganic Chemistry)	
CO1:	To enable studentsto understand about stereochemistry and bonding of various inorganic compounds on the basis of various theories.	
CO2:	To enable students o understand about spectrophotometric and potentiometric determination of metal ion and their reaction mechanism,	
CO3:	To enable studentsto understand about boron compounds, their derivatives and applications.	
CO4:	To enable studentsto know about different types and properties of metal-metal bonds and various types of polyacids	
	CH-102: Paper II (Organic Chemistry)	
CO1:	To enable students ounderstand about concept of aromaticity, various active intermediate, their properties and applications.	
CO2:	To enable studentsto understand about stereochemistry, conformationalanalysis and optical activity of various compounds.	
CO3:	To enable studentsto understand about various types of nucleophilicsubstitution reaction mechanism and its applications.	
CO4:	To enable studentsto gain knowledge about various types of aromaticnucleophilic and Electrophilic substitution reaction mechanism.	
CH-103: Paper III (Physical Chemistry)		

CO1:	To enable studentsto understand about relationship between microscopic properties of molecules with
	macroscopic thermodynamic observable.

CO2:	To make students to understand the concept of phase rule, its calculation and relationship with other factors.		
CO3:	To enable studentsto understand about surface phenomenon and properties and theories related to macromolecules.		
CO4:	To enable studentsto understand about temperature dependent reactions and various theories.		
	CH-104: Paper IV (Analytical Chemistry)		
CO1:	To enable students ounderstand about quantitative assessment of data and how to communicate the results of their experiments.		
CO2:	To enable students ounderstand about various types of techniques used for the separation and purification along with their applications.		
CO3:	To enable students ounderstand about various types of chemical method of analysis, their theories and various types of indicators		
CO4:	To enable studentsto understand about electrochemical methods likeconductometric and potentiometric methods.		
	CH-105: Practical-I (Inorganic Chemistry)		
CO1:	To enable studentsto understand about synthesis of inorganic complexes and their physiochemical analysis.		
CO2:	To enable students ounderstand about quantitative analysis of sometransition metals using various methods like volumetric, gravimetric and spectrophotometric methods.		
CO3:	To enable studentsto understand about qualitative analysis of variousinorganic mixtures.		
CH-106: Practical-II (Physical Chemistry)			

<b>CO: 1</b> To enable studentsto understand about various physical aspects and theirapplications.	
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	CH-107: Seminar-I	
CO:1	To enable studentsto gain knowledge and develop a positive attitude and confidence towards the subject.	
	M.Sc. Chemistry Semester II	
	CH-201: Paper V (Inorganic Chemistry)	
CO1:	To enable studentsto understand about electronic spectra and magneticproperties of transition metal complexes on the basis of various theories.	
CO2:	To enable studentsto understand about various types of reactionmechanism of transition metal complexes.	
CO3:	To enable studentsto understand about structure, classification and properties of carbonyl metal pi-complexes.	
CO4:	To enable students ounderstand about structure, classification and properties of nitrosyl metal pi-complexes along with their applications.	
	CH-202: Paper VI (Organic Chemistry)	
CO1:	To enable studentsto understand basics of carbon-carbon andcarbon hetero bond formation in organic molecules.	
CO2:	To enable studentsto understand fundamental basics of varioustypes of molecular rearrangement and elimination reactions.	
CO3:	To enable studentsto understand the structure, properties and various types of reactions involving free radicals.	
CO4:	To enable studentsto understand about the green chemistry and its applicationin various fields.	

	CH-203: Paper VII (Physical Chemistry)	
CO1:	To enable studentsto understand about quantum mechanics, Schrödingerwave equations and its applications along with the	
CO2:	To enable students ounderstand various theories of ideal and non-ideal systems along with the non-equilibrium thermodynamics.	
CO3:	To enable studentsto understand different types of solids crystals, their defects and their applications	
CO4:	To enable studentsto understand statistical thermodynamics and nuclear chemistry.	
	CH-204: Paper VIII (Analytical Chemistry)	
CO1:	To enable studentsto understand various sampling techniques and stoichiometric reactions	
CO2:	To enable studentsto understand various types of modern separationtechniques and their applications.	
CO3:	To enable studentsto understand various types optical methods of analysis like spectrophotometry, colorimetry and flame photometry.	
CO4:	To enable studentsto understand electrochemical methods used inanalysislike polarography and ampereometric titrations.	
	CH-205: Practical-III (Organic Chemistry)	
CO1:	To enable studentsto understand the separation, purification and identification of the mixture of organic compounds	
CO2:	To enable studentsto understand about multistep synthesis of some of organic compounds.	

	CH-206: Practical-IV (Analytical Chemistry)
CO1:	To enable studentsto understand the principles and applications of modern chemical instrumentation, experimenta design and data analysis.
CO2:	To enable studentsto understand various applications of electroanalytical techniques
	CH-207: Seminar-II
CO:	To enable studentsto understand the topics, gain confidence and develop a positive attitude towards the subject.
	M.Sc. Chemistry Semester III
	ORGANIC CHEMISTRY SPECIALIZATION
	CH-301: Paper IX (Special I-Organic Chemistry)
CO1:	To enable studentsto understand about organic photochemistry, it's theories and applications.
CO2:	To enable studentsto understand about pericyclic reactions, mechanismand its applications.
CO3:	To enable students ounderstand various types of oxidizing and reducing agents and important reactions associated with them.
CO4:	To enable studentsto understand about synthetic application and chemicalproperties of phosphorous, silicon, sulphur and boron compounds.
	CH-302: Paper X (Special II-Organic Chemistry)

CO1:	To enable studentsto understand about classification, nomenclature, occurrence, structural determination of
	terpenoids and porphyrins

CO2:	To enable studentsto understand about classification, nomenclature, occurrence, structural determination of alkaloids and prostaglandins.	
CO3:	To enable studentsto understand about classification, nomenclature,occurrence, isolation, structural determination of steroids and plant pigments.	
CO4:	To enable studentsto know about classification, nomenclature,occurrence, structural determination of some biomolecules like carbohydrates, amino acids, proteins andpeptides.	
	CH-305: Practical-V (Organic Chemistry Special)	
CO1:	To enable studentsto understand about quantitative analysis for theestimation of various compounds.	
CO2:	To enable studentsto gain knowledge of isolation techniques used inlaboratory.	
CO3:	To enable studentsto understand about qualitative analysis of some of organic compounds.	
	CH-303: Paper XI (Elective- Polymer Chemistry)	
CO1:	To enable studentsto understand about classification, nomenclature,occurrence, structural determination of various types of polymers	
CO2:	To enable studentsto understand about molecular mass determinationmethods of polymers.	
CO3:	To enable studentsto understand about methodology to study the physical properties of polymers.	
CO4:	To enable studentsto understand about classification, nomenclature,occurrence, structural determination of some of the commercial polymers.	
	CH-306: Practical VI–Elective (Polymer Chemistry)	

CO:1	To enable studentsto understand about synthesis and physicochemical properties of polymers
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	CH-304: Paper XII Core Subject Centric - I: Spectroscopy - I
CO1:	To enable students to know about the symmetry of molecules and applications of symmetrical operations and group theory.
CO2:	To enable studentsto understand about mass spectrometry and Mossbauerspectroscopic methods.
CO3:	To enable studentsto understand about principle and applications of microwave and esr spectroscopy.
CO4:	To enable studentsto understand about principles and applications of IRand Raman spectroscopy
	CH-307: Seminar-III
CO:1	To enable students ogain confidence on the topic given to them and developand interest along with positive attitude towards the subjects.
	M.Sc. Chemistry Semester IV
	CH-402: Paper XIV (Special II-Organic Chemistry)
CO1:	To enable studentsto understand about classification, nomenclature,occurrence, structural determination and kinetics of enzymes
CO2:	To enable studentsto understand about synthesis and chemical properties of some of the heterocyclic and bioactive compounds.
CO3:	To enable studentsto understand about classification, nomenclature,occurrence, structural determination of nucleic acids, lipids and vitamins
CO4:	To enable studentsto understand about classification, nomenclature,occurrence, synthesis and applications of various types of dyes,drugs.

CH-405: Practical-VII (Organic Chemistry Special)			
CO1:	To enable studentsto understand about classical and instrumentaltechnique.		
CO2:	To enable studentsto understand about various methods of estimationusing spectrophotometer and colorimeter.		
CO3:	To enable studentsto understand about multistep synthesis of some of theorganic compounds.		
CO4:	To enable students ounderstand about application of spectroscopy for the structural determination of some of the organic compounds.		
	CH-403: Paper XV (Elective- Polymer Chemistry)		
CO1:	To enable studentsto understand about the different types of polymerization.		
CO2:	To enable studentsto understand about various techniques ofpolymerizations.		
CO3:	To enable studentsto understand about various methods for the structural determination of polymers.		
CO4:	To enable studentsto understand about synthesis and application of various types of polymers		
	CH-404: Paper XVI Core Subject Centric – II: Spectroscopy – II		
CO1:	To enable students ounderstand the theories and applications of uv-visible spectroscopy for the structural determination of the organic compounds.		
CO2:	To enable studentsto understand thetheories and basic knowledge of nuclear magnetic resonance spectroscopy for the structural determination of the organic ompounds.		

CO3:	To enable students ounderstand about the application of spectroscopy for the structural determination of the
	organic compounds.

CO4:	To enable students know about theories and application of diffraction techniques for the structural determination of the organic compounds.		
CH-406: Practical VIII- Project			
CO:1	To enable students develop an interest towards the subject by developing a research aptitude and scientific approach towards the problems.		
	CH-407: Seminar-IV		
CO: 1	To enable students to explore them by developing the scientificattitude and confidence. towards the concern subjects.		

Course Outcomes of Master Of Commerce (M.Com.)	
SEMESTER - 1	
Paper-1	INDIAN FINANCIAL SYSTEM
CO1	To make aware the students about the financial market & capital market
CO2	Students will be familiar with the applicability of banking & Technology.
CO3	To know the overall functioning of insurance sector.
CO4	To acquire knowledge about the primary market secondary market functioning of SEBI.
Paper-2	MANAGERIAL ECONOMICS
CO1	To aware about demand forecasting of different product in market
CO2	To know the production process of different goods
CO3	To know about the price policy of company and administered price policy of government
CO4	To aware about the business cycle in economy
Paper-3	MARKETING MANAGEMENT
CO1	To familiarize the students with the philosophies of marketing - Environment
CO2	To understand the consumer & industrial

CO3	To acquire knowledge about the product & promotion strategies.	
CO4	To know vertical marketing implementation & systems.	
Paper-4	ADVANCE FINANCIAL ACCOUNTING	
CO1	How the accounting standards are applicable.	
CO2	How to maintain various types of records viz. statutory books, statutory reports etc. with the help of computer.	
СОЗ	To acquire the knowledge about the new trends in accounting.	
CO4	To get the knowledge about the hire purchase accounting, fire insurance claim, valuations of goodwill, valuation of shares etc.	
CO5	To Develop techniques and skills for analysis, interpretation of books of accounts and making good reports to managers which support decision making.	
	M.com II Even semester-II	
Paper-5	CO-OPERATION	
CO1	To make aware the students about the co-operative movement in india.	
CO2	To study the co-operative credit institutions in india.	
CO3	To integrate knowledge ,skill& attitude of co-operatives & rural economy.	

CO4	To understand the basic concept of globalization & co-operation
Paper-6	RESEARCH METHODOLOGY
CO1	To develop the research attitude in students
CO2	To know the significance of research in life
CO3	To understand methods of data Collection primary data & secondary data
CO4	To aware about the procedure for hypothesis testing
Paper-7	HUMAN RESOURCE MANAGEMENT
CO1	To know the role of significance of HRM
CO2	To learn how to face interview
CO3	To make aware the students about the recent trends in HRM in context with promotions & transfers.
CO4	To understand the concept & procedures of job evaluation and job design
CO5	To understand and significance of employee welfare & social measures.
Paper-8	ADVANCE COST ACCOUNTING:

CO1	Preparation of various types of cost statements
CO2	Preparation of budgets and ensure budgetary control
CO3	Assess the emerging themes in cost accounting.
CO4	Know the advanced costing systems like ABC.
CO5	Identify costs relevant for decision making and those which are irrelevant.
	SEMESTER - 3
Paper-1	COMPUTERISED ACCOUNTING IN COMMERCE
CO1	To acquire knowledge about E-business, E-commerce-commerce
CO2	To understand MS office & Use of different functions.
CO3	To acquire knowledge of Power-Point
CO4	To learn tally ERP.9
Paper-2	SERVICE SECTOR MANAGEMENT
CO1	To know the concept & applicability of KPO & BPO

CO2	To aware about the working of IRDA
СОЗ	To expose students about marketing concept
CO4	To understand customers needs & expectations.
Paper3	ADVANCE MANAGEMENT ACCOUNT
CO1	Describe and critically evaluate major developments in management accounting;
CO2	Prepare, explain and evaluate budgets and capital expenditures proposals.
CO3	Application of different types of ratios for management decision.
CO4	Evaluate management control and performance using relevant numerical and analytical statements like, fund flow, cash flow etc.
CO5	Application of breakeven analysis for management decision.
Paper-4	STATISTACAL TECHNEQUE
CO1	How to calculate and apply measures of location and measures of dispersion grouped and ungrouped data cases.
CO2	How to apply discrete and continuous probability distributions to various business problems.
CO3	Perform Test of Hypothesis as well as calculate confidence interval for a population parameter for single sample and two sample cases.

CO4	Learn non-parametric test such as the Chi-Square test for Independence as well as Goodness of Fit.
CO5	Compute and interpret the results of Regression and Correlation Analysis, for forecasting.
Paper-5	OPERATION RESERCH
CO1	To know how to maximize profit & minimize cost through mixed constraints in linearprogramming.
CO2	To learn how to assign work to the workers & employees
CO3	To understand the idea of economic ordering quality.
CO4	To apply concept of two person zero sum games & their solutions
Paper-6	E-COMMERCE
CO1	To know benefits of e-commerce
CO2	To understand the IT Act 2000 and cyber crimes.
CO3	To learn about E-payment system - Debit card, credit card, smart card, e- money.
CO4	To understand e-commerce applications in various industries like banking, online marketing etc
Paper-7	INTERNATIONAL BUSINESS ENVIRONMENT

CO1	To know the nature significance & elements of economic environment in current scenario
CO2	To integrated knowledge of international economic coopration 7 agreements among FIT investments Euro/ADR issue, mergers & acquisitions.
CO3	To expose students about exim policy, export promotion & impact substitution.
CO4	To learn about international co-operation
	SEMESTER 4
	Current Trends in digital Commerce
CO1	To make students aware about the benefits of digital commerce.
CO2	To acquaint students with the current trends in digital commerce in business environment.
CO3	To learn about different digital payments like Google pay phonepe at etc.
CO4	To understand business websites mobile apps etc.

	CO of MCA Department	
	SEMESTER - 1	
Paper-1	Advanced Java Programming	
CO1	Java Applets & Application, Object Oriented Programming In Java, Object & Classes.	
CO2	Java Class, Methods, Arrays, Applets 7.	
CO3	Creating GUI, Frames, Animation In Java, Threads.	
CO4	Networking in java.	
Paper-2	Data Communication and Network	
CO1	Data Communication:- Data Transmission, Data Encoding, Digital Data Communication, Data Link Control.	
CO2	Data Communication Networking:- Circuit Switching, Packet Switching, LAN & MAN	
CO3	Communication Architecture:- Protocols & Architecture, Internetworking.	
CO4	Protocols:-Transport Protocols, Session Services & Protocols.	
Paper-3	Open source Web Programming using PHP	
CO1	Describes the history of PHP, How to install to windows and Linex	

CO2	Describe how to use functions, string and Arrays in PHP
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CO3	Create class, object and different Web Techniques
CO4	Describe Graphics PDF, XML files
Paper-4	Advanced DBMS and Administration
CO1	Understand the working principle of Compiler design.
CO2	Understand the working of Top - down & Bottom - up parsing techniques.
СОЗ	Able to apply the knowledge of algorithms and implementation techniques for type-checking, code-generation and optimization.
CO4	Classify the various internal form of source program-semantic analysis, symbol tables, error detection and recovery and directed acyclic graph.
Paper-5	Software Engineering
CO1	Introduction to Software Engineering, A Generic view of process
CO2	Requirements engineering process, System models, Design Engineering
CO3	Object-Oriented Design, Testing Strategies, Product metrics
CO4	Metrics for Process and Projects, Quality Management
	SEMESTER - 2
Paper-1	C# and ASP .NET

CO1	Introduction to .NET, Introduction to Common Language Runtime (CLR) Requirement of .NET application
CO2	Introduction to C Sharp, Enum ,Files
CO3	Introduction to ASP .NET, Installing ASP .NET. ASP.NET Applications, Web Form Fundamentals
CO4	State Management Tracing, Logging and Error Handling, Advanced ASP. NET -Component-Based Programming
Paper-2	Cloud Computing
CO1	Origins and Influences to cloud computing, Implementation Levels of Virtualization.
CO2	Common Standards. Programming on Amazon AWS and Microsoft Azure.
CO3	Basic Terms and Concepts, Cloud Issues
CO4	Enabling Technologies for the Internet of Things, How the Cloud Will Change Operating Systems
Paper-3	Computer Graphics
CO1	Introduction of computer Graphics and its applications
CO2	Line drawing algorithms, DDA, Bresenham's, Circle generating, Mid-point circle algorithm
CO3	Basic transformation's, Composite transformation's, Reflection, Two dimensional viewi.
CO4	Fractal's geometry Fractal generation procedure, Gouraud shading, Phong shading.

Paper-4	Cyber Forensics	
CO1	Systems Vulnerability Scanning, Networks Vulnerability Scanning.	
CO2	Network Defense tools, Web Application Tools	
CO3	Introduction to Cyber Crime and law.	
CO4	Introduction to Cyber Crime Investigation	
Paper-5	Android Programming	
CO1	Getting an Overview of Android, The Command-Line Tools	
CO2	Using Activities, Fragments, and Intents in Android Working with Activities.	
CO3	Working with the User Interface Using Views and View Groups, Handling UI Events, Specialized Fragments, Handling Pictures and Menus with Views, Working with Image Views	
CO4	Storing the Data Persistently, Introducing the Data Storage Options, Using the Internal Storage, Using the External Storage	
	SEMESTER - 3	
Paper-1	Big Data Analytics	
CO1	Getting an Overview of Big Data, Introducing Technologies for Handling Big data, Understanding Hadoop Ecosystem, Understanding MapReduce Fundamentals and HBase	
CO2	Understanding Big Data Technology Foundation, Storing Data In Data Bases and Data Warehouses	

CO3	Exploring R, Reading DataSets and Exporting Data from R, Performing Graphical Analysis in R.
CO4	Data Visualization, Social Media Analytics and Text Mining
Paper-2	Data Mining
CO1	Introduction to Data Mining.
CO2	Exploring Data, Classification: Basic Concepts, Decision Trees, and Model Evaluation
CO3	Classification: Alternative Techniques, Association Analysis: Basic Concepts and Algorithms
CO4	Cluster Analysis: Basic Concepts and Algorithms, Anomaly Detection
Paper-3	Python Programming
raper-3	
CO1	Introducing Python, Python Fundamentals, Components of a python programming, Functions, Arguments, scoping, Exceptions and error trapping
-	Introducing Python, Python Fundamentals, Components of a python programming, Functions, Arguments,
CO1	Introducing Python, Python Fundamentals, Components of a python programming, Functions, Arguments, scoping, Exceptions and error trapping
CO1 CO2	Introducing Python, Python Fundamentals, Components of a python programming, Functions, Arguments, scoping, Exceptions and error trapping Python's Built-In Functions, Interfacing to the OS, Processing Information
CO1 CO2 CO3	Introducing Python, Python Fundamentals, Components of a python programming, Functions, Arguments, scoping, Exceptions and error trapping Python's Built-In Functions, Interfacing to the OS, Processing Information Working with Files, Using Python as RAD Tool Web Development Basics, Security Standard Markup Language Processing, Other Python Web Tool, The Python

CO2	Knowledge Representation, Predicate Logic.
CO3	Games playing, Planning:.
CO4	Understanding as Constraint satisfaction, Distributed Reasoning Systems.
Paper-5	Soft Computing
CO1	Introduction of soft computing, , A* algorithm, AO* Algorithms, Statistical Reasoning
CO2	Neural Network
CO3	Unsupervised learning in Neural Network, Adaptive Resonance Theory.
CO4	Fuzzy systems.
	SEMESTER - 4
	Project Work -
CO1	To take experience of live project.
CO2	To understand recent technologies.
СОЗ	Student personality development increase.
CO4	Project facility available by AICTE in MCA to get place in IT industry.

Course Outcomes of Master of Computer Management		
	SEMESTER - 1	
Paper-1	FUNDAMENTALS OF INFORMATION TECHNOLOGY	
CO1	Understand the meaning and basic components of computer system.	
CO2	Define and distinguish hardware and software components of computer systems.	
CO3	Gain knowledge about five generations of computer systems.	
CO4	Identify the various input and output units and their purpose.	
Paper-2	PROGRAMMING IN C & OOPS CONCEPT	
CO1	Understand and develop well-structured programs using C language.	
CO2	Understand the concept of problem solving and expression of solution through flow chart and algorithm.	
CO3	Able to use the concept of different memory allocation methods.	
CO4	Classify the various parts of program - data types, variables, operators, conditional & looping statements, functions, Pointers, Structure, Arrays, File handling.	
Paper-3	INTRODUCTION TO OPERATING SYSTEMS	
CO1	Understand the concept of Operating System.	
CO2	Perform the analysis of performance comparison and understand the concept of deadlock and determine the solution of it.	

CO3	Discuss various methods of scheduling.
CO4	Describe the various memory management techniques.
Paper-4	COMPUTERIZED ACCOUNTING (TALLY ERP 9)
CO1	Understand the Basic Accounting concept.
CO2	Understand the power and potential of Accounting Software (Tally ERP9) from the business perspective.
CO3	Company Setup & Configurations.
CO4	Understand the charts of Accounts Setup.
	SEMESTER - 2
Paper-1	MANAGEMENT INFORMATION SYSTEMS
CO1	Learn about the organizational and business context of systems development.
CO2	Learn to explain and apply system development methodologies, model, tools and techniques for developing quality software.
CO3	Learn to describe, organize and structure the components of system, including decisions about the system's hardware, software and network environment.
CO4	Learn about implementation, software testing, and deployment issues.
Paper-2	CORE JAVA
CO1	Understand the concept of Java programming.

CO2	Apply the knowledge of programming constructs.	
CO3	Discuss the various packages, applets, threads and exception handling.	
CO4	Perform the analysis of event driven java programming with graphics and controls using AWT toolkit	
Paper-3	QUANTITATIVE TECHNIQUES & OPERATION RESEARCH	
CO1	Understand the concept of statistics and operation research.	
CO2	Understand the importance of the use of OR application in decision Making environment	
СОЗ	To formulate LPP and Obtain Graphical Solutions & Acquire General idea of the Simplex method.	
CO4	To understand and solve transportation & assignment models.	
Paper-4	E-COMMERCE AND WEB DESIGNING	
CO1	Recognize the fundamental principles of e-Business and e-Commerce	
CO2	Recognize the impact of Information and Communication technologies, especially of the Internet in business operations	
CO3	Distinguish the role of Management in the context of e-Business and e-Commerce	
CO4	Examine applications of e-Commerce in relation to the applied strategic	
	SEMESTER - 3	

Paper-1	ADVANCE DATABASE MANAGEMENT SYSTEMS
CO1	Understand the working principle of Compiler design.
CO2	Understand the working of Top - down & Bottom - up parsing techniques.
CO3	Able to apply the knowledge of algorithms and implementation techniques for type-checking, code-generation and optimization.
CO4	Classify the various internal form of source program-semantic analysis, symbol tables, error detection and recovery and directed acyclic graph.
Paper-2	PRINCIPLES & TECHNIQUES OF MANAGEMENT
CO1	Discuss and communicate the management evolution and how it will affect future managers.
CO1 CO2	Discuss and communicate the management evolution and how it will affect future managers. Observe and evaluate the influence of historical forces on the current practice of management.

Course Outcomes of Post Graduate Diploma Of Computer & Commercial Application - (PGDCCA)		
	SEMESTER - 1	
Paper-1	FUNDAMENTALS OF INFORMATION TECHNOLOGY	
CO1	Understand the meaning and basic components of computer system.	
CO2	Define and distinguish hardware and software components of computer systems.	
CO3	Gain knowledge about five generations of computer systems.	
CO4	Identify the various input and output units and their purpose.	
Paper-2	PROGRAMMING IN C &OOPS CONCEPT	
CO1	Understand and develop well-structured programs using C language.	
CO2	Understand the concept of problem solving and expression of solution through flow chart and algorithm.	
CO3	Able to use the concept of different memory allocation methods.	
CO4	Classify the various parts of program - data types, variables, operators, conditional & looping statements, functions, Pointers, Structure, Arrays, File handling.	
Paper-3	INTRODUCTION TO OPERATING SYSTEMS	
CO1	Understand the concept of Operating System.	
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CO3	Discuss various methods of scheduling.
CO4	Describe the various memory management techniques.
Paper-4	COMPUTERIZED ACCOUNTING (TALLY ERP 9)
CO1	Understand the Basic Accounting concept.
CO2	Understand the power and potential of Accounting Software (Tally ERP9) from the business perspective.
CO3	Company Setup & Configurations.
CO4	Understand the charts of Accounts Setup.
	SEMESTER - 2
Paper-1	MANAGEMENT INFORMATION SYSTEMS
CO1	Learn about the organizational and business context of systems development.
CO2	Learn to explain and apply system development methodologies, model, tools and techniques for developing quality software.
CO3	Learn to describe, organize and structure the components of system, including decisions about the system's hardware, software and network environment.
CO4	Learn about implementation, software testing, and deployment issues.
Paper-2	CORE JAVA

CO1	Understand the concept of Java programming.
CO2	Apply the knowledge of programming constructs.
CO3	Discuss the various packages, applets, threads and exception handling.
CO4	Perform the analysis of event driven java programming with graphics and controls using AWT toolkit
Paper-3	QUANTITATIVE TECHNIQUES & OPERATION RESEARCH
C01	Understand the concept of statistics and operation research.
CO2	Understand the importance of the use of OR application in decision Making environment
CO3	To formulate LPP and Obtain Graphical Solutions & Acquire General idea of the Simplex method.
CO4	To understand and solve transportation & assignment models.
Paper-4	E-COMMERCE AND WEB DESIGNING
CO1	Recognize the fundamental principles of e-Business and e-Commerce
CO2	Recognize the impact of Information and Communication technologies, especially of the Internet in business operations
CO3	Distinguish the role of Management in the context of e-Business and e-Commerce

<b>CO4</b> Examine applications of e-Commerce in relation to the applied strategic	
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DEPARTMENT OF ENGLISH		
Course Outcome of BA English:		
CO1:	Students will be able to use correct English in oral and written communication.	
CO2:	Students will be able to learn and understand human values.	
CO3:	Student will be able to understand, analyse and interpret literary work via-a-vis day to day experience.	
CO4:	Students will be able to be creative about ideas and concepts in communication.	
	Course Outcome of BA English Literature:	
CO1:	Students will be able to understand figures of speech and literary framework of great litterateur, so that they would be able to employ them in their expression.	
CO2:	Students will be able to understand values and message out of the lessons or literary work so that they can meaningfully integrate them as part of their experiences.	
CO3:	Students will be able to express themselves creatively.	
Course Outcome of B.Com. English:		
CO1:	The Student will be able to develop basic language proficiency.	
CO2:	The Student will be able to develop Business Correspondence Skills.	

CO4:	The Student will develop soft skills.	
	Course Outcome of BBA English:	
CO1:	Students will be aware of the the global mindset.	
CO2:	She will develop functional and general management skills	
CO3:	Students will be able to communicate effectively in different contexts.	
CO4:	Students will be able to develop ethical thinking.	
	Course Outcome of BCCA Communication Skills:	
CO1:	The Student will be able to develop Business Communication skills	
CO2:	The Student will learn about the grammar, syntax and vocabulary that is helpful in commerce and business.	
CO3:	The Student will be able to develop soft skills.	
	Course Outcome of B.Com. Supplementary English:	
C01:	The Student will be able to develop general vocabulary and Business terminology	
CO2:	The Student will be able to develop grammar, vocabulary and syntax that will be helpful for business correspondence and communication.	

	Course Outcome of B.Sc. Compulsory English:	
CO1:	Students will be able to understand values and morals out of literary extracts.	
CO2:	Students will be able to know the importance of Liberal Arts so that they develop general intellectual capacities.	
CO3:	Students will be able to know the importance of Liberal Arts so that they develop general intellectual capacities.	
	Department of English	
	Course Outcomes:	
	Course Outcome of M.A. English:	
CO1:	The knowledge of Language and Literature will help students for research, job placement.	
CO2:	Students will be able to understand and analyze literary work on the basis of foundational concepts laid down by authors and critics.	
CO3:	Students will be able to express themselves with improved language ability in English language and literature.	

	DEPARTMENT OF ECONOMICS	
	COURES OUTCOMES	
	M.A Economics I <sup>st</sup> Year Semester I	
1T1: Micro	1T1: Micro Economic Analysis-I	
CO1:	To understand demand theory & its applicability.	
CO2:	To understand consumer behavior & elasticity of demand.	
CO3:	To understand concept of cost & production.	
<b>CO4:</b>	To understand various theory of firms & its applicability.	
1T2: Macro	1T2: Macro Economic Analysis-I	
CO1:	To understand concept of national income & circular flow of economic activity.	
CO2:	To understand various theories of employment & consumption function.	
CO3:	To understand concept of multiplier & Investment function.	
CO4:	To understand components of money supply like M1, M2,M3 & L1,L2,L3.	

1T3: Statist	1T3: Statistics for Economics-I	
CO1:	To understand concept, meaning, scope & important of statistics & Indian statistics.	
CO2:	To understand measuring central tendency, variability & shape.	
CO3:	To understand methods of correlation & regression analysis.	
CO4:	To understand concept of probability methods & density function.	
1T5: Indian	1T5: Indian economic policy-I	
CO1:	To understand nature of Indian economy.	
CO2:	To understand infrastructure and human development.	
CO3:	To understand economic planning in India.	
CO4:	To understand role of agriculture in Indian economy.	
1T10: Publi	IT10: Public Economics-1	
CO1:	To understand role of government & fiscal federalism in India.	
CO2:	To understand concept of public finance & their theories.	

CO3:	To understand concept of public policy.		
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CO4:	To understand concept of Indian Budget & Revenue.	
	M.A I (Economics) Year Semester - II	
2T1- Micro	2T1- Micro Economic Analysis-II	
CO1:	To understand concept of price and output in various markets competition, like Monopoly, monopolistic.	
CO2:	To understand excess capacity under imperfect competition.	
CO3:	To understand price & output under oligopoly, Game theory & theory of limit pricing.	
CO4:	To understand various theory of distribution like marginal productivity, rent, interest, profit & alternative theories of distribution.	
CO5:	To understand concept of welfare economics, welfare theories and market failure and public goods.	
2T2: Macro	o Economic Analysis-II	
CO1:	To understand classical & modern approach to demand for money.	
CO2:	To understand the concept of interest theories and wage flexibility.	
CO3:	To understand the theories of Inflation.	
CO4:	To understand the concept of trade cycles and financial markets.	

2T3: Statistics for Economics -II		
CO1:	To understand the concept of sampling distribution, estimation and various aspects of Hypothesis.	
CO2:	To understand the Test of Significance, chi-square analysis and analysis of variance.	
CO3:	To understand various concept of time series analysis and forecasting.	
CO4:	To understand measures and types of Index number.	
2T4: Indian	2T4: Indian Economic Policy–II	
CO1:	To understand the concept & policy of Industrial sector in India	
CO2:	To understand to concept of external sector of economy.	
CO3:	To understand the financial system in India,.	
CO4:	To understand the economic reforms & fiscal reforms in India& concept of WTO.	
2T10: Public	2T10: Public Economics-II	
CO1:	To understand Indian Tax system.	
CO2:	To understand public expenditure in India.	

CO3:	To understand public debt & deficit finance.	
CO4:	To understand concept of fiscal policy & federal system in India.	
	M.A Economics II <sup>nd</sup> Year Semester- III	
3T1: -Econo	3T1: -Economics of Growth & Development-I	
CO1:	To understand conceptualizing development.	
CO2:	To understand various issues in economic development.	
CO3:	To understand the theories of economic development.	
CO4:	To understand the classical & Neo classical models of growth.	
3T2: -Intern	3T2: -International Trade & Finance-I	
CO1:	To understand theories of National & International trade.	
CO2:	To understand recent development in international trade theories.	
CO3:	To understand gains from international trade & their measurements.	
CO4:	To understand effects of growth on trade.	

T5: -Labour Economics	
CO1:	To understand the concept of labour market & labour problem in India.

CO2:	To understand various aspects of employment & unemployment schemes & its applicability.
CO3:	To understand wage theory & its determination & labour market discrimination.
CO4:	To understand concept of Industrial relation & labour trade unions in India.
3T5: -Research Methodology-I	
CO1:	To understand various aspects of research in social science & its different types.
CO2:	To understand the concept of research methodology & hypothesis & its applicability.
CO3:	To understand concept of research design & sample designing.
CO4:	To understand methods of data collection & analysis.
M.A Economics II <sup>nd</sup> Year Semester- IV	
4T1: -Economics of Growth & Development-II	
CO1:	To understand various concept of domestic measures for economic development.
CO2:	To understand various aspect of domestic & International measures for economic development.
CO3:	To understand the concept of development of planning, its applicability & problems

4T2: -International Trade & Finance-II		
CO1:	To understand concept of trade restrictions in India.	
CO2:	To understand economic integration & international organizations like- UNCTAD, IMF, and WTO.	
CO3:	To understand concept of Balance of payment & foreign exchange system.	
CO4:	To understand foreign capital & trade policies in India.	
4T6: -Rural	4T6: -Rural Development	
CO1:	To understand concept, nature & scope of rural development in India.	
CO2:	To understand problems of rural development like- poverty, unemployment, & small & cottage industries.	
CO3:	To understand concept of rural financial structure.	
CO4:	To understand rural development strategies and programmes.	
4T10: -Resea	4T10: -Research Methodology-II	
CO1:	To understand concept of data processing and statistical analysis.	
CO2:	To understand concepts of hypothesis testing methods.	
CO3:	To understand contents of report writing.	

पाठ्यक्रम प्रतिफलन		
	CO-COURSE OUTCOME	
	कला प्रथम वर्ष:प्रथम सत्र (FIRST SEMESTER)	
	विषय : हिंदी साहित्य	
इकाई एक :		
	<ul> <li>विद्यार्थियों में पर्यावरण-संरक्षण-चेतना का निर्माण होगा 1</li> </ul>	
	<ul> <li>उनमें साहस, हिम्मत, स्वाभिमान, ईमानदारी, प्रेम, सहयोग आदि मानवीय मूल्यों का संचार होगा 1</li> </ul>	
इकाई दो :		
	<ul> <li>रवीन्द्रनाथ ठाकुर के व्यक्तित्व की विशेषताओं से विद्यार्थी परिचित होंगे 1</li> </ul>	
	<ul> <li>सिनेमा' विधा के इतिहास, प्रकारों से विद्यार्थी अवगत होंगे 1</li> </ul>	
इकाई तीन :		
	<ul> <li>'हिंदी साहित्य के आदिकाल' की राजनीतिक, सामाजिक, धार्मिक एवं साहित्यिक परिस्थितियों से विद्यार्थी अवगत होंगे 1</li> </ul>	
	<ul> <li>आदिकालीन साहित्य की भाषा, छंद आदि का विश्लेषण करने में वह समर्थ होगा 1</li> </ul>	
	<ul> <li>छोटे-छोटे विषयों पर कविता बना पाने में वह समर्थ होगा 1</li> </ul>	

इकाई चार :	
	<ul> <li>भारतेंदु हरिश्चंद्र, सियाराम शरण गुप्त , प्रभा खेतान, राजी सेठ इन साहित्यकारों के व्यक्तित्व एवं कृतित्व विद्यार्थियों को आकलन</li> </ul>
	<ul> <li>झांसी की रानी की समाधि पर , ग्राम लक्ष्मी की उपासना, मैं भी मानव हूँ इन रचनाओं के भावपक्षीय एवं कलापक्षीय वैशिष्ट्य से परिचित होंगे 1</li> </ul>
	कला प्रथम वर्ष :द्वितीय सत्र (SECOND SEMESTER)
	विषय : हिंदी साहित्य
इकाई एक :	
	<ul> <li>विद्यार्थियों में नाट्य विधा के प्रति रुचि निर्माण होगी।</li> </ul>
	<ul> <li>'आधे-अधूरे' नाटक के सानिभय पठान से उनमें अभिनय कला चेतना निर्माण होगी 1</li> </ul>
	<ul> <li>पारिवारिक मूल्यों के प्रति अधिक सजगता निर्माण होगी 1</li> </ul>
इकाई दो :	
	<ul> <li>नाटककार मोहन राकेश के व्यक्तित्व की विशेषताओं से विद्यार्थी परिचित होंगे ।</li> </ul>
	<ul> <li>'आधे-अधूरे' नाटक के भाव पक्ष एवं कला पक्ष वैशिष्ट्य से विद्यार्थी अवगत होंगे 1</li> </ul>
इकाई तीन :	

	<ul> <li>साहित्य की गद्य विधाओं को विद्यार्थी विश्लेषित कर सकेंगे 1</li> </ul>
	<ul> <li>कहानी, एकांकी आदि के स्वरूप को बताने में समर्थ होंगे 1</li> </ul>
इकाई चार :	
	• माखनलाल चतुर्वेदी, महावीर प्रसाद द्विवेदी, श्रीलाल शुक्ल, अशोक वाजपेयी आदि के व्यक्तित्व एवं कृतित्व के वैशिष्ट्य
	विद्यार्थी अवगत होंगे 1
	• जावन म स्नह-माव का महत्त्व, दहज़-प्रया, ारश्वत आदि म्रष्टाचारा एव बाहयाडम्बरा क विराध म आवाज़ उठान का
	वृत्ति विद्यार्थियों में जागृत होगी 1
	पाठ्यक्रम प्रतिफलन
	CO - COURSE OUTCOME
	कला द्वितीय वर्षः तृतीय सत्र (THIRD SEMESTER)
विषय : हिंदी साहित्य	
इकाई एक :	
	<ul> <li>विद्यार्थी कबीर एवं सूरदास के काव्य वैशिष्ट्य से अवगत होंगे 1</li> </ul>
	• विद्यार्थियों नैतिक चेतना का निर्माण होगा ।
इकाई दो :	

	<ul> <li>विद्यार्थी तुलसीदास एवं मीराबाई की चारित्रिक विशेषताओं को बताने में समर्थ होंगे 1</li> </ul>	
	<ul> <li>तुलसी एवं मीरा के पदों का रसास्वादन करने में वे समर्थ होंगे 1</li> </ul>	
इकाई तीन :		
	<ul> <li>'हिंदी साहित्य के भक्तिकाल' की राजनीतिक, सामाजिक, धार्मिक एवं साहित्यिक परिस्थितियों से विद्यार्थी अवगत होंगे 1</li> </ul>	
	<ul> <li>भक्तिकालीन साहित्य की भाषा, छंद आदि का विश्लेषण करने में वह समर्थ होगा 1</li> </ul>	
इकाई चार :		
	<ul> <li>रैदास, रसखान, नानकदेव, केशवदास, संत नामदेव, संत ज्ञानेश्वर, भूषण, सहजोबाई आदि के व्यक्तित्व एवं कृतित्व का विद्यार्थियों को</li> </ul>	
	आकलन होगा 1	
	<ul> <li>भक्ति साहित्य में इन रचनाकारों के प्रदेय को बता पाने में विद्यार्थी समर्थ होंगे 1</li> </ul>	
	कला द्वितीय वर्ष : चतुर्थ सत्र (FOURTH SEMESTER)	
	विषय : हिंदी साहित्य	
इकाई एक :		
	<ul> <li>विद्यार्थियों को उपन्यास विधा की तात्विक पृष्ठभूमि का परिचय होगा ।</li> </ul>	
	<ul> <li>'मृगनयनी' उपन्यास द्वारा उनमें ऐतिहासिक चेतना का निर्माण होगा।</li> </ul>	
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• उपन्यासकार वृन्दावन लाल वर्मा की उपन्यास कला के वैशिष्ट्य को विद्यार्थी बता पाने में समर्थ होंगे 11	
<ul> <li>'मृगनयनी' उपन्यास का औपन्यासिक तत्वों के आधार पर विश्लेषण कर पाने में वे सक्षम होंगे 1</li> </ul>	
<ul> <li>'रस' एवं 'अलंकार' का अर्थ एवं स्वरूप विद्यार्थियों को ज्ञात होगा ॥</li> </ul>	
<ul> <li>'अभिधा', 'लक्षणा' और 'व्यंजना' शब्द-शक्तियों का तुलनात्मक परिचय देने में विद्यार्थी समर्थ होंगे 1</li> </ul>	
• 'माधुर्य', 'ओज' तथा 'प्रसाद' काव्य-गुणों का उपयोजन करने की अभियोग्यता उनमे आएगी 1	
<ul> <li>'संत साहित्य', 'सूफी साहित्य', 'रामभक्ति शाखा' तथा 'कृष्णभक्ति शाखा' की प्रमुख विशेषताओं से विद्यार्थी अवगत होंगे 1</li> </ul>	
<ul> <li>सम्बंधित साहित्य के प्रमुख कवियों के नाम और उनके योगदान को बता पाने में विद्यार्थी समर्थ होंगे 1</li> </ul>	
<ul> <li>रीतिकालीन साहित्यिक प्रवृत्तियों एवं कवियों पर चर्चा की अभियोग्यता उनमें आएगी 1</li> </ul>	
पाठ्यक्रम प्रतिफलन	
CO (COURSE OUTCOME)	
कला प्रथम वर्ष: प्रथम सत्र (FIRST SEMESTER)	

विषय : अनिवार्य हिंदी	
इकाई एक :	
	<ul> <li>विद्यार्थी बातचीत में शिष्टाचार के नियमों से परिचित होंगे 1</li> </ul>
	<ul> <li>प्रशासनिक क्षेत्र से संबंधित भ्रष्टाचार-विरोधी चेतना उनमें जागृत होगी 1</li> </ul>
इकाई दो :	
	<ul> <li>विद्यार्थियों में प्रकृति के प्रति अनुराग के भाव संचरित होंगे ।</li> </ul>
	<ul> <li>विद्यार्थियों में जीवन-संघर्षों के प्रति स्वीकार भाव निर्मित होगा ।</li> </ul>
इकाई तीन :	
	<ul> <li>विद्यार्थी 'पारिभाषिक शब्दावली' के स्वरूप एवं प्रयोजन को जान सकेंगे ।</li> </ul>
	<ul> <li>हिंदी एवं अंग्रेज़ी पारिभाषिक शब्दों का उपयोजन कर सकने में समर्थ होंगे 1</li> </ul>
	• पत्र-विधा के स्वरूप से विद्यार्थी परिचित होंगे ।
	<ul> <li>'कार्यालयीन', 'व्यावाहारिक', 'आवेदन'आदि पात्र-प्रकारों के महत्त्व को समझते हुए विद्यार्थी उसका जीवन में उपयोजन करेंगे 1</li> </ul>
इकाई चार :	
	• बालकृष्ण भट्ट, प्रेमचंद, राजकमल चौधरी, रामेश्वर शुक्ल अंचल आदि रचनाकारों के कृतित्व को वे जान सकेंगे 1

	<ul> <li>जीवन की सच्ची जीत, बाज़ार एवं ग्राहक आदि की वास्तविकता से उनका परिचय होगा 1</li> </ul>	
	पाठ्यक्रम प्रतिफलन	
	CO (COURSE OUTCOME)	
	कला प्रथम वर्ष: द्वितीय सत्र (SECOND SEMESTER)	
	विषय : अनिवार्य हिंदी	
इकाई एक :		
	• विद्यार्थी कलकत्ता के सामाजिक, राजनीतिक एवं आर्थिक परिवेश तथा नर्मदा नदी के सौंदर्य से परिचित होंगे 1	
	• जीवन के प्रति संघर्ष-चेतना उनमें जागृत होगी 1	
इकाई दो :		
	<ul> <li>विद्यार्थियों में प्रकृति संरक्षण के भाव संचरित होंगे ।</li> <li>विद्यार्थियों में जीवन के प्रति आशावादी दृष्टिकोण, सद्गुणों का महत्त्व, पारिवारिक मूल्यों संघर्षों के प्रति स्वीकार</li> </ul>	
	निर्मित होगा 1	
इकाई तीन :		
	• विद्यार्थी कल्पना-विस्तार की संकल्पना से परिचित होंगे 1	
	• मुहावरे एवं लोकोक्तियों का वे समुचित उपयोग कर सकेंगे ।	

इकाई चार :	
	<ul> <li>विद्यार्थी नामवर सिंह, स्वदेश भारती, ममता कालिया, राजेश जोशी आदि रचनाकारों के कृतित्व को जान सकेंगे</li> </ul>
	<ul> <li>पारिवारिक मूल्यों, सामजिक नैतिक मूल्यों के प्रति वे सजग होंगे 1</li> </ul>
	पाठ्यक्रम प्रतिफलन
	CO (COURSE OUTCOME)
	कला द्वितीय वर्ष: तृतीय सत्र (THIRD SEMESTER)
	विषय :अनिवार्य हिंदी
इकाई एक :	
	<ul> <li>विद्यार्थियों में पर्यावरण के प्राणियों के प्रति संरक्षण-चेतना का निर्माण होगा 1</li> </ul>
	<ul> <li>जीवन में उपयोगिता एवं कला तथा आदर्श एवं व्यावहारिकता इन दोनों पक्षों के प्रति समन्वय-बुद्धि का उनमें</li> </ul>
	होगा ।
इकाई दो :	
	• विद्यार्थी 'फीचर लेखन' के स्वरूप से अवगत होंगे 1
	• उनमें 'प्रूफ शोधन'की योग्यता का निर्माण होगा ।
इकाई तीन :	

	• शिवमंगल सिंह 'सुमन', मनोहर श्याम जोशी, रवीन्द्र कालिया, चित्रा मुद्गलआदि रचनाकारों के व्यक्तित्व एवं कृतित्व से विद्यार्थी र
	होंगे 1
इकाई चार	
	<ul> <li>ठेले पर हिमालय, पतझड़, दोपहर का भोजन, भोर का तारा आदि रचनाओं के अध्ययन द्वारा विद्यार्थियों में प्रकृति-प्रेम,</li> </ul>
	भावना, देशप्रेम आदि गुणों का विकास होगा ।
	पाठ्यक्रम प्रतिफलन
	CO (COURSE OUTCOME)
	कला द्वितीय वर्ष: चतुर्थ सत्र (FOURTH SEMESTER)
	विषय : अनिवार्य हिंदी
इकाई एक :	
	<ul> <li>निबंध, रेखाचित्र, व्यंग्य एवं आत्मकथा जैसी विधाओं से विद्यार्थी भली-भांति परिचित होंगे 1</li> </ul>
	• पूर्व राष्ट्रपति अब्दुल कलाम के महान व्यक्तित्व से वे जीवन-संघर्ष की प्रेरणा लेंगे 1
इकाई दो :	
	<ul> <li>नैतिक विकास के अंतर को आकलित कर सकेंगे 1</li> </ul>
	<ul> <li>मानवीय मूल्यों का महत्त्व, रिश्तों के मध्य की पावन चेतना से वे परिचित होंगे 1</li> </ul>

	<ul> <li>विद्यार्थियों में आध्यात्मिक व नैतिक मूल्यों का निर्माण होगा</li> </ul>		
	<ul> <li>उनमें देश के प्रति गर्व एवं गौरव-मूल्यों का निर्माण होगा 1</li> </ul>		
इकाई तीन :			
	<ul> <li>विद्यार्थी पारिभाषिक शब्दावली का व्यावहारिक उपयोग कर पाने में समर्थ होंगे 1</li> </ul>		
इकाई चार :			
	<ul> <li>'कल्पना विस्तार' संकल्पना से वे परिचित होंगे 1</li> </ul>		
	पाठ्यक्रम प्रतिफलन		
	CO (COURSE OUTCOME)		
	वाणिज्य प्रथम वर्ष : सेमिस्टर द्वितीय		
	विषय : अनिवार्य हिंदी		
इकाई एक :			
	<ul> <li>विद्यार्थियों में पर्यावरण-सजगता की चेतना संवर्धित होगी 1</li> </ul>		
	<ul> <li>आधुनिक साइबर तकनीक के लाभों को बता पाने में वे समर्थ होंगे।</li> </ul>		
इकाई दो :			

	<ul> <li>विद्यार्थी के मन में प्रकृति एवं पर्यावरण के प्रति प्रेम भावना उपजेगी 1</li> </ul>	
	<ul> <li>साक्षरता एवं ज्ञान के उपयोग को वे जान सकेंगे ।</li> </ul>	
इकाई तीन :		
	• मुहावरे एवं लोकोक्तियों के रसास्वादन की क्षमता उसमें विकसित होगी ।	
इकाई चार :		
	• पत्र-लेखन कला कौशल का उनमें विकास होगा 1	
	पाठ्यक्रम प्रतिफलन	
	CO (COURSE OUTCOME)	
	वाणिज्य द्वितीय वर्ष : सेमिस्टर तृतीय	
	विषय : अनिवार्य हिंदी	
इकाई एक :		
	<ul> <li>विद्यार्थीजीवन में व्यावहारिक ज्ञान को सैद्धांतिक ज्ञान की तुलना में अधिक महत्त्व देगा 1</li> </ul>	
	• वह परिश्रम, अनुशासन, साहस आदि गुणों का जीवन में उपयोग करना सीखेगा।	
	<ul> <li>पर्यावरण प्रदूषण, उसके कारणों एवं उपायों पर समूह चर्चा कर उनका व्यावहारिक पालन करने की चेतना उसमें</li> </ul>	

<ul> <li>पालतू पशुओं के प्रति स्नेह-निर्मिति जैसे मानवी मूल्यों का निर्माण उसमें होगा 1</li> </ul>
<ul> <li>तुलसीदास, मीरा बाई आदि के पदों द्वारा विद्यार्थियों में आध्यात्मिक मूल्यों का निर्माण होगा</li> </ul>
• रहीम के दोहों से नैतिक मूल्यों का निर्माण होगा 1
• विद्यार्थी अपना 'जीवनवृत्त'स्वयं तैयार करने में सक्षम होगा 1
• रोज़गार हेतु 'साक्षात्कार' का सफलतापूर्वक सामना करने की क्षमता उसमें विकसित होगी 1
पाठ्यक्रम प्रतिफलन
CO (COURSE OUTCOME)
वाणिज्य द्वितीय वर्षः सेमिस्टर चतुर्थ
विषय : अनिवार्य हिंदी
• विद्यार्थियों में पारिवारिक मूल्यों के प्रति आदर की भावना संवर्धित होगी ।

	• कर्माश्रित जीवन के प्रति उनका दृष्टिकोण दृढ़ होगा 1	
इकाई दो :		
	• विद्यार्थी के मन में प्रकृति एवं पर्यावरण के प्रति प्रेम , जाति-पाति से ऊपर उठकर मानव धर्म के प्रति आस्था उपजेगी 1	
	<ul> <li>ऐतिहासिक महापुरुषों-वीरांगनाओं के प्रति श्रद्धा एवं प्रेरणा निर्मित होगी ।</li> </ul>	
इकाई तीन :		
	<ul> <li>विद्यार्थी 'प्रतिवेदन लेखन' कर पाने में समर्थ होगा ।</li> </ul>	
इकाई चार :		
	<ul> <li>विद्यार्थी समाचारों के स्वरूपगत वैशिष्ट्य से परिचित होंगे ।</li> </ul>	
	<ul> <li>वे विविध कार्यक्रमों के 'समाचार लेखन' हिंदी भाषा में प्रभावी रूप से कर पाएंगे।</li> </ul>	
	पाठ्यक्रम प्रतिफलन	
	CO (COURSE OUTCOME)	
विज्ञान प्रथम वर्ष : सेमिस्टर प्रथम		
	विषय : अनिवार्य हिंदी	
इकाई एक :		

<ul> <li>विद्यार्थियों में बुजुर्गों के प्रति प्रेम, सहयोग, त्याग आदि पारिवारिक मूल्यों का संवर्धन होगा 1</li> </ul>	
<ul> <li>वर्तमान राजनीतिक स्थिति के प्रति चेतना-दृष्टि का उसमें विकास होगा 1</li> </ul>	
<ul> <li>विषम सामाजिक परिस्थितियों के प्रति विद्यार्थियों के मन में संवेदनशीलता तीव्र होगी 1</li> </ul>	
<ul> <li>राजनीतिक परिदृश्य में वैचारिक परिपक्वता का उनमें विकास होगा</li> </ul>	
<ul> <li>विद्यार्थियों का 'निबंध विधा' के स्वरूप से परिचय होगा ।</li> </ul>	
<ul> <li>वर्तमान शैक्षणिक, राजनीतिक, सामाजिक मुद्दों एवं समस्याओं को विद्यार्थी निबंध विधा के माध्यम से अभिव्यक्त करने में समर्थ</li> </ul>	
पाठ्यक्रम प्रतिफलन	
CO (COURSE OUTCOME)	
विज्ञान प्रथम वर्ष : सेमिस्टर द्वितीय	
विषय : अनिवार्य हिंदी	

	<ul> <li>विद्यार्थी जीवन में रिश्तों में स्नेह, निस्वार्थ, धैर्य-संयम आदि के महत्त्व को जान सकेंगे 1</li> </ul>
	<ul> <li>जाति पर आधारित विषम-व्यवहार के प्रति विद्यार्थियों विरोधी चेतना-दृष्टि का विकास होगा ।</li> </ul>
इकाई दो :	
	<ul> <li>विषम सामाजिक परिस्थितियों के प्रति विद्यार्थियों के मन में संवेदनशीलता तीव्र होगी 1</li> </ul>
	<ul> <li>राजनीतिक परिदृश्य में वैचारिक परिपक्वता का उनमें विकास होगा 1</li> </ul>
इकाई तीन :	
	<ul> <li>विद्यार्थी 'पत्र-लेखन' विधा के स्वरूप से परिचित होंगे ।</li> </ul>
इकाई चार :	
	• विद्यार्थी कार्यालयीन पत्र, व्यावहारिक पत्र, आवेदन पत्र आदि के मध्य के अंतर को विश्लेषित करने में तथा उनका
	उपयोजन करने में सक्षम होंगे 1

	पाठ्यक्रम प्रतिफलन	
	CO-COURSE OUTCOME	
	एम. ए. हिंदी साहित्य - प्रथम वर्ष:प्रथम सत्र (FIRST SEMESTER)	
	विषय : 1T1 हिंदी साहित्य का इतिहास (आदिकाल से रीतिकाल तक)	
इकाई एक :		
	• विद्यार्थी साहित्य-लेखन की ऐतिहासिक परंपरा से परिचित होंगे 1	
इकाई दो :		
	• विद्यार्थी आदिकालीन साहित्य को उसकी राजनीतिक, सामाजिक, धार्मिक आदि परिस्थितियों के परिप्रेक्ष्य में आकलित कर	
इकाई तीन :		
	• विद्यार्थी हिंदी साहित्य के भक्तिकाल की राजनीतिक, सामाजिक, धार्मिक एवं साहित्यिक परिस्थितियों से विद्यार्थी अ	
	<ul> <li>भक्तिकाल की प्रतिनिधि धाराओं को विश्लेषित करने मे वह समर्थ होगा।</li> </ul>	
इकाई चार :		
	• रीतिकालीन साहित्यकारों के व्यक्तित्व एवं कृतित्व विद्यार्थियों को आकलन होगा 1	

	<ul> <li>रीतिकालीन रचनाओं के भावपक्षीय एवं कलापक्षीय वैशिष्ट्य से विद्यार्थी परिचित होंगे 1</li> </ul>
प्रश्न पत्र 2 - 1T2	: भारतीय काव्यशास्त्र
इकाई एक :	
	• विद्यार्थी काव्य के लक्षण, हेतु, प्रयोजन, प्रकार बता पाने में समर्थ होंगे
	• विद्यार्थी भारतीय काव्य चिन्तन परम्परा को विश्लेषित का सकेंगे
इकाई दो :	
	• विद्यार्थी अलंकार एवं रस सिद्धांत की अवधारणाओं से परिचित होंगे
	• विद्यार्थी रस सिद्धांतों का व्याहारिक उपयोजन करने में समर्थ होंगे
इकाई तीन :	
	• विद्यार्थी रीति और ध्वनि सिद्धांत की अवधारणाओं से परिचितहोंगे
	• विद्यार्थी रीति और ध्वनि सिद्धांतों के भेद बताने में सक्षम होंगे
इकाई चार :	
	• विद्यार्थी वक्रोक्ति और औचित्य सिद्धांत की अवधारणाओं से परिचित होंगे
	• विद्यार्थी वक्रोक्तिवाद और अभिव्यंजनावाद में अंतर बताने में समर्थ होंगे

प्रश्न पत्र ३ :1T3-	मध्यकालीन काव्य
इकाई एक :	
	• विद्यार्थी कबीर के व्यक्तित्व एवं कृतित्व से अवगत होंगे ।
इकाई दो :	
	• विद्यार्थी जायसी और सूरदास – काव्य की विशेषताओं से परिचित होंगे
इकाई तीन :	
	• विद्यार्थियों को तुलसीदास के काव्य वैशिष्ट्य का परिचय होगा
इकाई चार :	
	• विद्यार्थी घनानंद एवं बिहारी की काव्य विशेषताओं को तुलनात्मक रूप में प्रस्तुत करने में सफल होगा
प्रश्न पत्र 4 : 1T4 (	A)– हिंदी नाटक और रंगमंच
इकाई एक :	
	• विद्यार्थियों को हिंदी नाटक एवं रंगमंच की भारतीय परम्परा का परिचित होगा 1
इकाई दो :	
	• विद्यार्थियों को प्रसाद कृत 'चन्द्रगुप्त' नाटक के ऐतिहासिक परिवेश का ज्ञान होगा

इकाई तीन :		
	• विद्यार्थी 'आधे-अधूरे' नाटक की आधुनिक संवेदना से परिचित होंगे।	
इकाई चार :		
	• विद्यार्थी 'कबिरा खड़ा बाज़ार में' नाटक की मूल संवेदना को बता पाने में सक्षम होंगे	
	पाठ्यक्रम प्रतिफलन	
	CO	
	(COURSE OUTCOME)	
	एम. ए. हिंदी साहित्य - प्रथम वर्षःद्वितीय सत्र (SECOND SEMESTER)	
विषय : 2T1 हिंदी	विषय : 2T1 हिंदी साहित्य का इतिहास (आधुनिक काल)	
इकाई एक :		
	• विद्यार्थी आधुनिक कल की पृष्ठभूमि से परिचित होंगे	
	• वे हिंदी गद्य के आविर्भाव एवं हिंदी नवजागरण की स्थितियों को जान सकेंगे	
इकाई दो :		
	• विद्यार्थियों को भारतेंदु , द्विवेदी तथा छायावादी युग की प्रवृत्तियों का परिचय होगा	

	• वे तुलनात्मक रूप से उपरोक्त युगीन साहित्यकारों का तुलनात्मक वैशिष्ट्य बता पाने में समर्थ होंगे
इकाई तीन :	
	• विद्यार्थी प्रगतिवाद, प्रयोगवाद, नई कविता, नव गीत, अकविता तथा समकालीन कविता के भाव पक्ष एवं कला पक्ष को बत
	में सफल होंगे 1
इकाई चार :	
	• विद्यार्थी उपन्यास-कहानी, नाटक-एकांकी, निबंध, संस्मरण-रेखाचित्र, जीवनी-आत्मकथा, यात्रावृत्तान्त, रिपोर्ताज आदि विधाओं के विकास
	का विश्लेष्ण करने में सक्षम होंगे
	• विद्यार्थी हिंदी आलोचना के विकास से परिचित होंगे
प्रश्न पत्र २ : 2T2	- हिंदी आलोचना : दृष्टि एवं प्रवृतियां
इकाई एक :	
	• विद्यार्थियों का हिंदी आलोचना की विकास यात्रा से साक्षात्कार होगा
इकाई दो :	
	• विद्यार्थी हिन्दी आलोचना की प्रमुख प्रवृत्तियों यथा- सामाजिक, सौंदर्यशास्त्रीय, शैलीविज्ञान, समाजशास्त्रीय, नई समीक्षा जैसे
	आलोचनात्मक प्रवृतियों तथा नए विमर्शों के परिप्रेक्ष में हिंदी साहित्य को आकलित करेंगे
इकाई तीन :	

	• आ. रामचन्द्र शुक्ल, हजारी प्रसाद द्विवेदी, नन्द दुलारे वाजपेयी, रामविलाश शर्मा, नामवर सिंह आदि प्रमुख आलोचकों के
	परिचितहोंगे
इकाई चार :	
	• विद्यार्थी विजय देव नाराजं साही, मुक्तिबोध, अशोक वाजपेयी, रमेशचंद्र शाह आदि रचनाकार-आलोचकों के प्रदेय को बता
	समर्थ होंगे
प्रश्न पत्र ३ : 2T3	- आधुनिक काव्य
इकाई एक :	
	• विद्यार्थी आधुनिक युगीन महाकाव्य 'कामायनी'(श्रध्दा सर्ग) के भावपक्ष एवं कलापक्ष से परिचित होंगे 1
इकाई दो :	
	• विद्यार्थी निराला-काव्य (राम की शक्ति, कुकुरमुता)की विशेषताओं से परिचित होंगे
इकाई तीन :	
	• विद्यार्थियों को अज्ञेय(असाध्य वीणा) और मुक्तिबोध(अँधेरे में) के काव्य वैशिष्ट्य का परिचय होगा
इकाई चार :	
	• विद्यार्थी नागार्जुन, रघुवीर सहाय, धूमिल, राजेश जोशी की काव्य विशेषताओं को तुलनात्मक रूप में प्रस्तुत करने में
2T4 (C)प्रश्न पत्र 4 – प्रेमचंद	

इकाई एक :	
	• विद्यार्थियों को प्रेमचंद की रचना दृष्टि और रचना संसारका परिचित होगा 1
इकाई दो :	
	• विद्यार्थियों को प्रेमचंद कृत उपन्यास 'गबन' द्वारा भारत की तत्कालीन सामाजिक परिस्थितियों का ज्ञान होगा
इकाई तीन :	
	<ul> <li>विद्यार्थी प्रेमचंद कृत कहानियों कफन', 'पूस की रात', 'ठाकुर का कुआं' की संवेदना से परिचित होंगे 1</li> </ul>
इकाई चार	
	• विद्यार्थीप्रेमचंद के निबंध'साहित्य का उद्देश्य' का केंद्रीय भाव आकलित करने में सक्षम होंगे