2.6.1 Programme and course outcomes for all Programmes offered by the institution are stated and displayed on website and communication to teachers and students

Post Graduate (PG) Programmes

P G Programme Outcomes

- Attain Competence in Discipline
- Enable to develop Interdisciplinarity
- Encourage Research Aptitude
- Pertain Ethical Principles and entrust to Professional Ethics and responsibilities
- Incorporte Self-directed and Life-long Learning
- Cater Contempory and Up-to-date Knowledge
- Integrate Setting Goals

DEPARTMENT OF MATHEMATICS

Programme Specific Outcomes (PSOs) – M. Sc Mathematics Programme

PSO1:	Understand the nature of abstract mathematics and explore the concepts in further details.
PSO2:	To assimilate complex mathematical ideas and arguments.
PSO3:	Provide advanced knowledge on topics in pure mathematics, empowering the students to pursue higher degrees at reputed academic institutions.
PSO4:	Good understanding of number theory which can be used in modern online cryptographic technologies
PSO5:	Comprehend and write effective reports and design documentation related to mathematical research and literature, make effective presentations
PSO6:	Assist students in preparing (personal guidance, books) for competitive exams e.g. NET, GATE, etc.

Course outcomes

SEMESTER	COURSE CODE	COURSE NAME		COURSE OUTCOMES
1	MTH1CO1	ALGEBRA -I	CO1:	Concept of group action and theorems about group actions.
			CO2:	Ability to understand a large class of commutative rings by regarding them as quotients of polynomial rings by suitable ideals.
			C03:	Provide information on ideals and Quotient rings, Field of Quotient of an integral domain.
			C04:	To introduce field extensions and Construction of finite fields

1	MTH1CO2	LINEAR ALGEBRA	CO1:	Vector theory: subspace, basis, linear independence, inner product spaces etc
			CO2:	Discuss Algebra of Linear Transformations and Characteristics roots
			C03:	Finding the eigenvalues and eigenvectors of linear transformations
			C04:	Explains canonical forms and inner product space
1	MTH1CO3	REAL ANALYSIS 1	CO1: CO2:	Basic idea of metric spaces, examples and the connected set Students should be able to illustrate the effect of uniform convergence on the limit function with respect to boundedness, continuity, differentiability and integrability
			C03:	Learn the theory of Riemann-Stieltjes integrals, to be acquainted with the ideas of the total variation and to be able to deal with functions of bounded variation.
			C04:	After completing the course, the student should be able to recognize, understand and apply concepts and methods in advanced real analysis.
1	MTH1C04	NUMBER THEORY	CO1:	Understand the concepts of divisibility and Primes and Solve congruences.
			CO2:	Solve the average arithmetic functions and some elementary theorems

			C03:	Describe briefly the cryptography and some keys
1	MTH1C05	DISCRETE MATHEMATICS	CO1:	Understand the definitions namely, cut vertex, bridge, blocks and Automorphism group of a graph.
			CO2:	Study the properties of trees and connectivity and Identify Eulerian graphs and apply results to identify Hamiltonian graphs.
			C03:	Study the basic concepts of automata theory
2	MTH2C06	ALGEBRA -II	CO1:	Explain Sylow theorem and its applications.
			CO2:	Explains the Automorphism of fields and the splitting fields
			C03:	To introduce field extensions CO8 Discussion of Galois theory
2	MTH2C07	REAL ANALYSIS II	CO1: CO2:	Measurable sets and Lebesgue measure, construction of non-measurable sets. Lebesgue integration, convergence theorems for Lebesgue integrals and Fubini's theorem.
			C03:	To introduce measure theoretic integration
			C04:	Deciding under which conditions the fundamental theorem of calculus is applicable in the context of Lebesgue integration.
2	MTHC08	TOPOLOGY	CO1:	Introducing topology as a generalization of metric spaces

			CO2:	Know the definition and basic properties of connected spaces, path connected spaces, compact spaces, and locally compact spaces;
			C03:	To introduce the peculiarities of compactness and connectedness in different spaces
			C04:	Explains the separation axioms and the product topology
2	MTH2C09	ODE AND CALCULUS OF VARIATION	CO1:	Obtain solutions of the Homogeneous equation with constant co-efficient and Homogeneous equation with analytic co-efficient.
			CO2:	Introduction to calculus of variation and the existence of solution
			C03:	Solution of first order differential equations
2	MTH2C10	OPERATIONS RESEARCH	CO1:	Analyze Graphical Method, Use of Artificial variables and Inverting a Matrix using Simplex method.
			CO2:	Understand Test the optimality for Degeneracy by using Transportation Algorithms (MODI method).
			C03:	Study Assignment Problem and its applications.
3	MTH2C11	MUTIVARIABLE CALCULUS AND GEOMETRY	CO1:	Impart basic knowledge of differentiation and integration in n-dimensional Euclidean space.
			CO2:	To get an idea of application of real analysis in geometry
			C03:	Understand Gauss Map-Geodesics and Apply Parallel Transport and Weingarten map

			C04:	Study the concept of Curvature of plane curves and surface
3	MTH3C12	COMPLEX ANALYSIS	CO1:	Introduce complex integration to understand analytic functions in a better way.
			CO2:	Solve the problems using complex analysis techniques applied to different situations in engineering and other mathematical contexts.
			C03:	Establish the capacity for mathematical reasoning through analysing, proving and explaining concepts from complex analysis
			C04:	Understanding of topological and geometric properties of the complex plane.
3	MTH3C13	FUNCTIONAL ANALYSIS	CO1:	Concept of normed linear spaces and inner product spaces and the bounded linear operators between these spaces.
			CO2:	Study Continuous linear transformations and the Hahn-Banach theorem.
			C03:	Understand the relevance of Operator Theory.
			C04:	The learner will be able to understand and apply fundamental theorems from the theory of linear operator

3	MTH3C14	PDE AND INTEGRAL EQUATIONS	CO1: CO2:	To introduce Partial differential equations for solving real life situations. Analyze the origin of first order partial differential equations and solving them using Charpit's method.
			C03:	Understand the formation and solution of some significant PDEs like wave equation, heat equation and diffusion equation.
			C04:	Introduction to integral equations and Newman series
3	MTH3E01	CODING THEORY	CO1:	Understand the concept of Maximum-Likelihood Decoding and Syndrome Decoding.
			CO2:	Analyze Double Error-Correcting B.C.H. code and Finite Fields Polynomials
			C03:	Study the concept of Bose-Chaudhuri-Hocquenghem (B.C.H.) Codes and Weight distributions
4	MTH4C15	ADVANCED FUNCTIONAL ANALYSIS	CO1:	Understand and apply fundamental theorems from the theory of normed spaces, including the Uniform Boundedness theorem, the open mapping theorem, the closed graph theorem, and the Banach Fixed Point theorem.
			CO2:	Have a good grasp of the spectral properties of various operators such as Compact Linear Operators, Self-adjoint linear operators, Positive Operators and Projection Operators.

			C03:	Understand and apply ideas from spectral theory to other mathematical contexts and related areas
4	MTH4E06	ALGEBRAIC NUMBER THEORY	CO1:	Deals with the basic concepts of modules and quadratic fields
			CO2:	Explains the factorization of polynomials
			C03:	Understand lattices, factorization of a rational primes, Fermat's last theorem
4	MTH4E09	DIFFERENTIAL GEOMETRY	CO1:	Understand the concept of Graphs and Level Sets-Vector fields.
			CO2:	Analyze Surfaces and Vector field on surfaces And Understand Gauss Map-Geodesics.
			C03:	Apply Parallel Transport and Weingarten map and Study the concept of Curvature of plane curves and surface
4	MTH4C11	GRAPH THEORY	CO1:	Write precise and accurate mathematical definitions of objects in Graph theory
			CO2:	To introduce connectivity, colouring and the concept of planarity
			C03:	Discuss and understand the importantance of the concepts Matchings and Colourings.

DEPARTMENT OF CHEMISTRY

Programme Specific Outcomes (PSOs) – M. Sc Chemistry Programme

	Programme specific outcomes
PSO1	Provide theoretical background and develop practical skills for analysing materials using modern analytical methods and instruments.
PSO2	Inculcateaproblemsolvingapproachbycoordinatingthedifferentbranchesof chemistry.
PSO3	Becomesprofessionallyskilledforhigherstudiesin researchinstitutionsandtowork in chemicalindustries
PSO4	In-depthknowledgehelpstoqualifyincompetitiveexams

Programme Specific Outcomes (PSOs) – M. Sc Chemistry Programme

	Programme specific outcomes
PSO1	Development of skills on using softwares like Gaussian, Gamessetc which is useful in molecular modeling, drug designing, etc.
PSO2	Development of skills on using softwares like Chemdraw, Chemwindow, ISIS draw, etc which is useful in drawing purposes, structural predictions, etc.
PSO3	Training on computational chemistry
PSO4	Case study and analysis on any relevant issues in the nearby society(for example water analysis, soil analysis, acid/alkali content analysis, sugar content analysis, etc)
PSO5	Community linking programme relevant to the area of study(For example Training for society on soap/perfume making, waste disposal, plastic recycling, etc)

Course Outcomes

Semester	Course Code	Course Name	Course outcomes
I	CHE1C01	Quantum Mechanicsand Computational Chemistry	• CO1:Explainatomicstructurebasedonquantummechanicsand explain periodicproperties of the atoms
			• CO2:Understand the concept of quantummechanics
			• CO3: Solve theproblems related to 1D box
			• CO4:Explain role ofoperators in quantum
			• CO5:Understand the concept of Computational Chemistry
			• CO6:Detaileddiscussion of postulates of quantum mechanics– State function or wave function postulate, Born interpretation of the

			wave function, well behaved functions, ortho normality of wave functions
			• CO7:Understand Quantum Mechanics of Translational & Vibrational Motions
			• CO8:Explain the ApproximationMethods inQuantumMechanics
			• CO9:Simple calculations using Gaussian programme
			• CO10:ClassificationofComputationalChemistry methods
I	CHE1C02	Elementaryinorganic chemistry	• CO1:Explaindifferentacidbasetheories
			• CO2:Classificationofacidsandbasesashardand soft.
			• CO3:Chemistryofnonaqueoussolvents
			• CO4:Understand NuclearandRadiationChemistry
			• CO5: **S**tudy of Chemistry ofNanomaterials
			• CO6:Chemistry of Transition and Inner Transition Elements
			• CO7: Structure of Zeolites and use of Zeolites as molecularsieves
I	CHE1C03	Structure and reactivityof organicCompounds	• CO1:Understand the Structure and Bonding in Organic Molecules
			• CO2:Preparation of aromatic and antiaromatic compounds
			• CO3:Describereaction mechanism of organic reactions and various reaction intermediates
			• CO4: ConformationalAnalysis
			• CO5: Asymmetric Synthesis
			• CO6:Explain optical isomerism of compounds that do not contain an asymmetric carbon atom.
I	CHE1C04	Thermodynamics, kinetics, and catalysis	• CO1:To understand the concepts of thermodynamics and it'srelation to statistical thermodynamics.
			• CO2:Understand Thermodynamics of Solutions
			• CO3:Understand Thermodynamics of Irreversible Processes
			• CO4:Study the Kinetics of reactions involving reactive atom sand free radicals
			• CO5:ExplainRice-Herzfeld mechanism and steady state approximation
			• CO6:Explain Principle of crossed molecular beams

I	CHE1L01 & CHE2L04	Inorganicchemistrypractical I&II	• CO1 **:** An ability to analyse the cation mixture
			• CO2:Ability to estimate the ions by complex ometric titrations
			• CO3Ability to estimation of compounds by intensity of colour using colorimetric methods
I	CHE1L02 & CHE2L05	Organic chemistry Practical I&II	• CO1- Familiarize the methods for the Separation and Purification of Organic Compounds
			• CO2-Ability to Separate and identify the components of organic binary mixtures
I	CHE1L03 & CHE2L06	Physical chemistry practical I &II	• CO1 :To enable the students to develop analytical skills in determining the physical properties (physical constants).
			• CO2:To develop skill in setting up an experimental method to determine the physical properties
			• CO3:To understand the principles of Refractometry, Potentiometry and Conductometry.
II	CHE2C05	Group Theory and Chemical Bonding	• CO1: To understand the foundations ofGroup Theory & Molecular Symmetry
			• CO2:Familiarise the Representations of Point Groups& Corresponding Theorems
			• CO3: Enable the students to applyGroup Theory to Molecular Spectroscopy and Chemical Bonding
			• CO4: Study of Chemical Bonding in diatomic and polyatomic molecules.
II	CHE2C06	Coordination chemistry	• CO1:To predict the stability of Coordination Compounds by various effects.
			• CO2: Explain various theories of Bonding in Coordination Compounds
			• CO3:Demonstrate the Electronic Spectra and Magnetic Properties of Complexes
			• CO4:Characterization of Coordination Complexes
			• CO5: To elucidate Reaction Mechanism of Metal Complexes
II	CHE2C07	Reaction mechanism in Organic Chemistry	• CO1:To understand aliphatic and aromatic, nucleophilic and electrophilic substitution with mechanism and kinetics
			• CO2:To develop an ability to understand addition and elimination reactions with mechanism and stereo chemical aspect

			• CO3:To understand the competition between substitution and elimination reactions according to the conditions of reagents and substrate
			• CO4 : Students will be able to understand all the nucleophilic condensations reactions of carbonyl compounds
			• CO5 : To impart the students in depth knowledge about the basic concepts and theory of pericyclic reactions and to get an idea about the orbital overlap in chemical reaction
			• CO6 : To enable the students to acquire proper knowledge about photochemical reactions with mechanism
			• CO7 : The students will be able to understand acyl-oxygen and alkyl-oxygen bond fission in ester hydrolysis according to the conditions.
II	CHE2C08	Electrochemistry, solid state chemistry, and Statistical Thermodynamics	• CO1:Describe Debye –Huckel equation , limiting and extended forms
			• CO2:Calculate effect of ionic strength on ion reaction rates
			• CO3:Compare the efficiency of electro chemical cells with heat engines
			• CO4:Explain the advantages and limitations of lead-acid, Ni-Cd and Ni-MH cells.
			• CO5:State the different theories of Hydrogen over voltage
			• CO6:Explain Polarography and dropping mercury electrode
			• CO7:Explain symmetry elements, symmetry operations and crystal systems.
			• CO8:Derive Braggs equation and explain the applications
			• CO9 :Explain the stoichiometric and non stoichiometric defects in crystals
			• CO10 :Explain Maxwell Boltzman statistics
			• CO11 :Explain classical and quantum theories of heat capacities of solids and Einstein's theory of atomic crystals
			• CO12 :Explain the relationship between Maxwell-Boltzman, Bose-Einstein and Fermi Dirac statistics

III	CHE3C09	Molecularspectroscopy	• CO1:To understand the theory and application of rotational spectra of diatomic and polyatomic molecules
			• CO2: To study the principle and major theories of vibrational,electronic and raman spectroscopy.
			• CO3:To study chemical shift,coupling , ,shielding and desheilding in NMR specrtoscopy
			• CO4:To understand the basic principles of ESR and Mossbauerspecroscopy
			• C05 :To study CD and ORD.Also basic ideas of vibrational spectroscopy
			• CO6:To study interpretation of NMR spectra of organic molecules
			• CO7:To understand the advanced NMR techniques
			• CO8 :To study the principle behind Mass spectroscopy as well as Structural determination of organic compounds using spectroscopic techniques
III	CHE3C10	Organom-etallic & Bio-inorganic chemistry	• CO1:Toillustratethe use of 18 and 16 electron rule .also to study the properties and synthesis of metal carbonyls
			• CO2:Tostudy the structure and synthesis of Organometallic Compounds of Linear and Cyclicπ- Systems
			• CO3:To study major Organometallic Reactions and Catalysis
			• C04:To account the structure of carbonyl clusters using electron count rules
			• CO5:To understand electron transport in biological systems
			• CO6:To study Metallo enzymes and electron carrier metallo proteins.
III	CHE3C11	Reagents and Transformations in Organic Chemistry	• CO1:To study different types of reagents used for oxidation and mechanism of oxidations
			• CO2:To study different types of reagents used for reduction and mechanism of reductions
			• CO3:To study the applications of some specifc reagents
			• CO4:To study the structure and synthesis of protein, DNA and RNA
			• CO5:To understand the basics of Hetero cyclic chemistry and supramolecular chemistry

			• CO6:To study different types of rearrangement reactions
III	CHE3E01	Synthetic organic chemistry(Elective)	• CO1:Toundertand the use of Reagents forOxidationandReduction
			• CO2:To study Synthetic applications of organometallic and organo-nonmetallic reagents including Reagents based on chromium,nickel, palladium,silicon, andborn
			• CO3:To understand and study the named Reactions ofcarbonylgroupsin aldehydes,ketones, carboxylic acids, esters, acyl halides, amides.
			• CO4:To study different Coupling Reactions
			• CO5:TO understand how to carried out a multy step synthesis
			• CO6:Generalprinciplesof retrosynthetic analysis. Synthons and reagents, donor and accept or synthons, umpolung, protecting group chemistry and functional group interconversions
IV	CHE4C12	Instrumental Methods ofAnalysis	• CO1:To treat Statistical data by f-test,t- test and q test
			• CO2:To understand different analytical techniques
			• CO3:To understand potentiometry,ion selective electrodes & polarography
			• CO4:To study the principle behind amperometry,coulometry and anodic stripping voltammetry
			• CO5:To study the instrumentation of spectrophotometry, nephelometry and turbidometry, fluorimetry, UV-visible, IR spectrophotometry AES and AAS
			• CO6:To study the Theory,instrumentationandapplicationsof:- Atomicfluorescencespectrometry,X-ray methods-X-rayabsorption and X-raydiffraction,photoelectronspectroscopy,Auger, ESCA. SEM, TEM, and AFM
			• CO7:To study the Theory, instrumentation and applications of TG,DTA,DSC ,and thermometric titrations
			• CO8:To understand the principle and applications of different chromatographic techniques

IV	CHE3L7 & CHE4L10	Inorganic ChemistryPractical III &IV	• CO1:To familiarize the Estimation involving quantitative separation of suitable binary mixtures of ionsin solution by volume tricolor imetricor gravimetric methods .
			• CO2:To understand Colorimetric estimations of Ni,Cu,FeandMo,after separation from other ions insolution by solvent extraction
			• CO3:To understand how to determine the Hardness ofwater
			• CO4: Preparation of inorganic complexes
IV	CHE3L8 & CHE4L11	Organic Chemistry Practical III & IV	• CO1:To study the Determination of Acid value,iodine value and saponification value of oils
			• CO2:To study how to Extract chlorophyll by TLC
			• CO3:Practicalapplication of PC and TLC, preparation of TLC plates, activation, identification of the following classes of compounds using one-and two-dimensional techniques. Identificationby usingsprayreagents
IV	CHE3L9 & CHE4L12	Physical ChemistryPractic alIII & IV	• CO1:Determination of specific reaction rate and Arrhenius parameter of of acid hydrolysis of anester (methylacetateor ethyl acetate) and concentration of the given acids.
			• CO2:Verification of Langmuir adsorption isotherm
			• CO3:Determination of phase diagram of aternary liquid system
			• CO4:Determination of molecular mass of absolute (urea,glucose,canesugar,mannitol)by studying the depression in freezing point of a liquid solvent (water, benzene)
			• CO5:Determination of specific rate of inversion of cane sugar in presence of HCL.
			• CO6:Investigation of complex formation between Fe(III)and thiocyanate.
			• CO7:Single point energy alculations of simple molecules like H_2O and NH_3 at the HF/3-21G level of theory.

IV	CHE4E06	Naturalproducts& PolymerChemistry (Elective)	• CO1:To understand the Classification and isolation of Natural Products & essential oils
			• CO2:To study the the Classification and structure elucideation of some terpenoids and steroids
			• CO3:To study the the Classification and structure elucideation of alkaloids and flavanones
			• CO4:To understand different types of dyes and pigments
IV	CHE4E08	Organometallic Chemistry	• CO1:To understand main group and transition metal organometallics
			• CO2:To study Bonding and reactions of metal carbonyls
			• CO3:To study the synthesis, Structure, reactivity and applications of main group or ganometallic compounds. Metalcomplexes of NO,H_2,CS,RNC and Phosphines Metalcarbenes and carbynes
			• CO4:To study the structure &bonding of organometallic pi complexes
			• CO5:To understand the Applications of organometallic compounds inorganic synthesis and homogeneous catalysis
			• CO6:To study different organometallic reactions
			• CO7:To understand the application of organometallic compounds in heterogeneous catalysis
			• CO8:To study about organometallic polymers
IV	CHE4P01	Research Project	• CO1:To understand the scientific methods of research project.
			• CO2:To apply the scientific method in life situations.
			• CO3:To analyse scientific problems systematically.

DEPARTMENT OF BOTANY

Programme specific outcomes :-MSc Botany 2019 Admission:

	Programme specific outcomes
PSO1	Develop a conceptual understanding of principles and importance of Botany. Students would be benefited with knowledge of core subjects like plant diversity, physiology and biochemistry, molecular cytogenetic and application of statistics etc. which are offered in these subjects Modules on analytical techniques, plant tissue culture and photochemistry would make them obtain skills that help in doing research.
PSO2	: Learn about practical technique in lab for detail study of plant cell structure, reproduction, anatomy, breeding procedures for hybridization. Maintain a high level of scientific excellence in botanical research with specific emphasis on the role of plants. Create, select and apply appropriate techniques, resources and modern technology in multidisciplinary way. Practice of subject with knowledge to design experiments, analyze and interpret data to reach to an effective conclusion.
PSO3	They would identify, formulate and analyze the complex problems with reaching a substantiated conclusion. Logical thinking with application of biological, physical and chemical sciences. Learning that develops analytical and integrative problem-solving approaches.
PSO4	Students would perform functions that demand higher competence in national/international organizations with sporty and helping spirits. Prepare the students for many competitive exams like MPSC, UPSC NET SET GATE.
PSO5	Best problem-solving skills in students would encourage them to carry out innovative research projects thereby making them to use knowledge creation in depth. Enable the students to be resourceful in identifying the plants
PO6	Knowledgeable, disciplined students with good values, ethics, and kind heart will help in nation building globally. Student should be aware of ethical issues and regulatory considerations while addressing society needs for growth with honesty

Course Outcomes

Semester	Course Code	Course Name	Course outcomes
I	BOT01CT01	Phycology, Bryology, Pteridology and Gymnosperms	• CO1:Describe the principles of classification algae
			• CO2:Explain the algal cytology, reproduction and pigment system in algae.
			• CO3:Understand the evolutionary relationship of different family: chlorophyceae , xanthophyceae , bacillariophyceae, phaeophyceae, rhodophyceae.

			• CO4:Students can compare the characters of different orders &relationship of each order from Cordaitales to Gnetales. Student can critically differentiate the characters of three orders of Gymnosperm i.e., Ginkogales, Coniferales, and Taxales.
			• CO5:Explain various developmental details of angiosperms.
			• CO6:Realize the significance and applications of palynology.
I	BOT01CT02	Mycology and Lichenology, Microbiology and Plant Pathology	• CO1:Students will be able to understand the structure, type and identification of Bacteria and cyan bacteria
			• CO2:Students will gain understanding of the classification, structure of mycelium reproduction of fungal species. They will know about the hazardous and useful fungi. Student will also know and learn classification and evolutionary trends in fungi.
			• CO3:Understanding of the plant diseases, causal organism, host and their relationship and control measure for plant diseases, understanding of fungicide and use of chemical physical and biological controlling of diseases mentioned in the unit.
			• CO4:Explain the classification with examples and characteristic features of Bryophytes
			• CO5:Describe the origin and evolution of bryophytes
			• CO6:Explain the general account of fossil bryophytes and their affinities and economic importance of bryophytes.
			• CO7:Describe the characteristic features of pteridophytes,cytology,structure and evolution of pteridophytes.
			• CO8:Explain the comparative morphology, ecology, phylogeny of following: psilopsida, lycopsida, sphenopsida, filicopsida and its economic importance
			• CO9:Explain the classification of gymnosperms-distribution,morphology, anatomy,reproduction, and interrelations some orders

			• CO10: Elucidate the phylogenetic relationship of gymnosperms and economic importance of gymnosperms
I	BOT01CT03	Angiosperm Anatomy, Embryology, Palynology and Lab Techniques	• CO1:Explain the general characters of fungi, classification of fungi and its phylogeny
			• CO2:Describe the general account of myxomycota, mastigomycota, zygomycota, Ascomycota, basidiomycota and mitosporic fungi
			• CO3:Explain the fungi as symbionts: lichenology: general account and systematics of lichens,thallus structure,reproductive bodies, ecological significance, and economic importance of lichens.
			• CO4:Understand main groups of microorganisms, classification of bacteria, plasmids and their characterization, cyanobacteria features,viruses general classification
			• CO5:Explain the agricultural microbiology, food microbiology and industrial microbiology.
			• CO6:PLANT PATHOLOGY-Understand the principles of plant pathology, details of different symptoms of plant diseases, process of infection.
			• CO7:Study host parasite interaction, plant disease management, and explain the disease with reference to the symptoms,causal organisms,disease cycle, and control measures
I	BOT01CP04	Practicals of Phycology, Bryology, Pteridology, Gymnosperm, Mycology, Lichenology,	• CO1:Student can identify different types of forms of algae
			• CO2:Student can classify and identify the fungal genus and specimen included.
			• CO3:Student can make micropreparation of the material of Pteridophyta and bryophytes and idenfied anatomically.
			• CO4:Student can collect few species from locality and identify morphologically during collection of material in the local visit.
			• CO5:Students can critically differentiate fossil and living fossil. Students will also understand the evolutionary tendencies and comparative morphology of Cycadales, Cycadeodales and Pteridospermales.

			• CO6:Student can classify and identify the Lichen genus and specimen included.
I	BOT01CP05	Microbiology and Plant Pathology, Angiosperm Anatomy, Embryology, Palynology and Lab Technique	• CO1:Student can identify different types of forms of cyanobacteria
			• CO2:The students will learn about the basic concepts in anatomy.
			• CO3:Study the techniques of pollen isolation and its structural study
			• CO4:Identification of the disease, pathogen, symptoms and their control measures
			• CO5:Be enlightened about the mechanism of pollination and basic structure of the embryo.
			• CO6:Understand Double staining techniques and preparation of serial sections
II	BOT02CT06	Cell Biology, Molecular Biology and Biophysics	• CO1:Student will understand the importance of cell wall. structure of nucleus, nucleolus and genome organization of prokaryotes and eukaryotes, scaffold protein. They also get to know about plasmodesmata.Mitosis and meiosis, general characters significance G S M phase and gap phase
			• CO2:Student will understand the role of various cell organelles. They will have developed knowledge about various phases of cell division. Cell communication and apoptosis and cell differentiation and cancer
			• CO3:Students will have developed knowledge about nucleus and its ultrastructure. They will also identify various forms of DNA.
			• CO4:Student will understand the importance of stresses in plants and how its responses.
			• CO5:Molecular biology gene and DNA, repetitive DNA and c-value paradox, replication of prokaryotes and eukaryotes and its enzymology. Gene expression and its regulation,operon concept, gene regulation in prokaryotes and eukaryotes. enhancers and silencers. Transcription and post transcriptional events and translation of prokaryotes and eukaryotes. mutation of gene and its significance and finally molecular evolution.

II	BOT02CT07	Cytogenetics, Genetics, Biostatistics, Plant Breeding and Evolution	• CO1:Understanding of the history of gene from 'something', 'factor'; and gene and one gene one enzyme one characters hypothesis. Student will also know the interaction of gene, genetic recombination producing the characters differently.
			• CO2:Understanding of the structure of chromosome and how the packaging of DNA occurs. Student can differentiate Euchromatin and heterochromatin region of chromosome on the basis of staining properties. Student can draw a good karyotype and Idiograms of Karyotype, and also how the evolution of Karyotype takes place.
			• CO3:understand the fundamental concepts of biostatistics
			• CO4:Familiarize with the various concepts of evolution
			• CO5: The students will understand the fundamental aspects of plant breeding involving the principles, achievementsPoly ploidy breeding significance, application, merits and demerits, mutational breeding.
II	BOT02CT08	Plant Ecology, Conservation Biology, Phytogeography and Forest Botany	• CO1:Understand habit ecology and salient features of biomass, productivity and energy flow. Population density, natality and mortality. Environmental pollution and its type and its effect on living beings. Greenhouse effect, EL-nino, LAL-nino, deforestation, over production of recourse. Rare, endangered, vulnerable, red data book. Conservation strategies, NGO, biodiversity and its significance
			• CO2:The students will understand the use of the plant resources to produce valuable products.
			• CO3:Understand phytogeographical distribution of plants, dis continuous distribution. Phytochoria world and India and endemic distribution.
			• CO4:Identify plant resources and awareness of conserving natural resources and maintaining the integrity of the indigenous culture. Forest definition, influence of forest on environment and products of forest.

II	BOT02CP09	Practicals of cellbiology, molecular biology, biophysis and cytogenetics	• CO1:Appreciate the ultra-structure of a plant cell and able to identify the cell organelles.
			• CO2:Study of mitosis in root tip,isolation of plastid and mitochondria. Chromosome banding. Working of problem in molecular genetics, SDS –PAGE, isolation of plant DNA,ELISAand western blot.
			• CO3:Able to solve problems regarding Deletion, mutation, addition etc
			• CO4:Skill development in karyotype analysis and ideogram preparation
			• CO5:preparation buffer and measurement of PH, paper and thin layer chromatography,
II	BOT02CP10	Practicals of genetics and biostatistics, plant breeding, plant ecology, conservation biology, phytogeography and forest botany	• CO1: identification of floristic region in map, BOD determination in water sample.
			• CO2:Problem solving skill in biostatistics and genetics
			• CO3:Develop skill of Plant breeding techniques
			• CO4: Develop conservation aspects
			• CO5: Awareness about the various phytogeographical areas.
			• CO6:Able to identify the forest products
III	BOT03CT-11	Plant physiology, metabolism and biochemistry	• CO1: Understand about physiological response deeply
			• CO2: Briefly discuss about photosynthesis.
			• CO3: Explain the patterns of development, stress physiology etc.
			• CO4: Appreciate the energy fixing and energy release take place in cells.
			• CO5: Discuss about different types of enzymes.
			• CO6: Elaborate carbohydrate biosynthesis and lipid biosynthesis.
			• CO7: Draw and explain the structure of biomolecules.
			• CO8: Explain secondary metabolite, physiological roles and significance

III	BOT03CT-12	Angiosperm morphology and taxonomy and plant resources	• CO1:Appreciate the physiological morphology of angiosperms
			• CO2:Identify and classify the plants based on economic principles.
			• CO3: Realize the importance of field study
			• CO4:Understand the origin of morphological parts of flower
			• CO5:Analyze modern trends in taxonomy and taxonomical developments in India.
III	BOT03CT13	Biotechnology and bioinformatics	• CO1:Critically evaluate the mechanism of tissue culture and different types of tissue culture.
			• CO2:Analyse different methods of genetic engineering
			• CO3:Explain DNA sequencing transgenic plants, cloning, patenting of genes.
			• CO4:Explain computer applications and its relevance in biology
			• CO5:Appreciate biological data base searching, protein structure predictions and emerging areas of bioinformatics
III	BOT03CP14	Practicals of Plant physiology, metabolism, biochemistry, angiosperm morphology, taxonomy	• CO1:Determine the water potential by tissue weight change method.
			• CO2:Extraction of leaf pigments by paper chromatography
			• CO3:Testing of seed viability by TTC method.
			• CO4:PH dependent activity profile of enzymes.
			• CO5:Quantitative estimation of protein by biuret
III	BOT03CP15	Practicals of plant resources, biotechnology, bioinformatics	• CO1:Identify the family up to species of plants
			• CO2:Understand various biotechnological methods and GMO plants
			• CO3: Information about Bioinformatics tools
IV	BOT04ET01	Elective I Plant tissue culture	• CO1: Understand about basics of tissue culture
			• CO2:Analyse the production and marketing of tissue culture.
			• CO3:Differentiate cultural medium of tissue culture
			• CO4:Understand about hormones, hardening of cultures

IV	BOT04ET02	Elective II Pathology of plantation crops and spices	• CO1:Understand the plantaion crops and spices of our country and their cultivation
			• CO2: Describe crop research institutes.
			• CO3:Discuss about system of reproduction, conventional methods and modern methods of plant breeding the above said groups
			• CO4:Study about various diseases and control measures
VI	BOT04EP01	Practicals of Electives	• CO1: Medium preparation
			• CO2:Study about the production plan
			• CO3: Clump inoculation
			• CO3:Morphological and floral studies of major crops
			• CO1:Understand various techniques employed for increasing crop productivity
			• CO2: Identify diseases affecting crop plants
			• CO3: Attain general awareness on various crop research stations of the country.

DEPARTMENT OF COMMERCE

Programme Specific Outcomes (PSOs):- M.Com FINANCE Programme

	Programme Specific Outcomes
PSO1	To provide awareness to the learners regarding the developments in the field of Business, Commerce, Industry and Management
PSO2	Equip students to develop necessary analytical and managerial skills so as to cope up with the challenges posed by industry and environment, both national and global.
PSO3	Enable the learners to carry out qualitative research and pursue academic or professional careers,
PSO4	Applicability of knowledge acquired in the context of society, environment and sustainable development sticking on to the ethics and values, developing effective communication skills and ability to work in teams by strengthening group dynamics, fostering ability to engage in lifelong learning, demonstrating empathetic social concern, contributing to the development of nation

Course Outcomes:

SEM	**Course code**	**Course Name**	**Course specific outcomes**
1	MCM1CO1	BUSINESS ENVIRONMENT & POLICY	• CO1:Introduces fundamentals of Business Environment • CO2: To familiarize students with the concepts of macro-economic in which a Business organization operates. • CO3:Gives an idea about the policies of the government and assess their impact on business.
1	MCM1CO2	CORPORATE GOVERNANCE AND BUSINESS ETHICS	• CO1: To make the students understand the importance of ethics and also make them aware of good business and corporate governance
1	MCM1CO3	QUANTITATIVE TECHNIQUES FOR BUSINESS DECISIONS	• CO1:Introduces basic concepts and ideas in Quantitative Techniques for Business Decision. • CO2: Aims to acquaint students with important quantitative techniques, which enable sound business decision making. This would enable the students to learn the process of applying appropriate quantitative techniques for validating findings and interpreting results.

1	MCM1CO4	MANAGEMENT THEORY AND ORGANISATION AL BEHAVIOUR	• CO1: Helps to understand the conceptual framework of management and organization behavior. • CO2:The course aims to provide information about managerial applicability of various concepts.
1	MC1CO5	ADVANCED MANAGEMENT ACCOUNTING	• CO1:To familiarize the students with financial statement, principals of accounting • CO2: Develop their skills in reading annual reports and provide foundation for developing the skills in interpreting financial statement for managerial decisions.
2	MCM2CO6	ADVANCED CORPORATE ACCOUNTING	• CO1:To gain ability to solve problems relating to Holding Company, Accounts, Liquidation of Companies and various other Accounts. • CO2: The course is expected to provide theoretical knowledge of International Financial Reporting Standards
2	MCM2CO7	ADVANCED STRATEGIC MANAGEMENT	• CO1: Helps to provide an awareness regarding various types of strategies and applications of same along with strategic formulation, implementation and evaluation.
2	MCM2CO8	ADVANCED COST ACCOUNTING	• CO1: This paper helps to learn about the higher application of cost accounting techniques and principals. • CO2: Helps to know about applications of cost control techniques.
2	MCM2CO9 :	INTERNATIONAL BUSINESS	• CO1: Helps to acquaint the students with various concepts of foreign trade and international business.
2	MCM2C10	MANAGEMENT SCIENCE	• CO1: Aims to familiarize students with concepts of management science and tools supporting decision making. • CO2: Enables students to apply Management science techniques in appropriate decision situations.
3	MCM3C11	FINANCIAL MANAGEMENT	• CO1: Acquaints the students with the basic analytical techniques and methods of financial management of business organization. • CO2: Strives to provide the students the exposure to certain advanced analytical techniques that are used for taking financial policy decisions.

3	MCM3C12	INCOMETAX LAW,PRACTICE AND TAX PLANNING 1	• CO1: The course intends to enable the students to understand computation of taxable income of various entities and procedure of assessment
3	MCM3C13:	RESEARCH METHODOLOGY	• CO1: Acquaints students with process and methodology of research. • CO2: Enables the students to identify research problems, collect and analyse data and present results.
3	MCM3E01:	FOREGIN TRADE MANAGEMENT	• CO1: Helps to learn about different types of documents used in international trade • CO2: Provides information about various tariff and non-tariff measures.
3	MCM3E02:	FINANCIAL MARKETS AND INSTITUTIONS	• CO1: Familiarize the students with financial market operations in India
4	MCM4C14:	FINANCIAL DERIVATIVES AND RISK MANAGHEMENT	• CO1: Demonstrates an understanding of the uses of financial engineering and risk management approaches and techniques used by modern organisations. • CO2:The course also helps to make informed judgements on the use of derivative instruments. • CO3: Helps to evaluate, synthesize and communicate the ethical implications of financial risk management policies and practices to an intended audience.
4	MCM4C15:	INCOME TAX LAW, PRACTICE AND TAX PLANNING II	• CO1: Tries to acquaint the students with theoretical and practical knowledge of tax planning and management techniques. • CO2: Familiarizes the students with major and latest provisions of the India tax laws and related judicial pronouncements pertaining to various assesses with a view to derive maximum possible tax benefits admissible under the law.
4	MCM4E03:	INTERNATIONAL FINANCE	• CO1: Aims to provide a detailed idea about macro environment on which financial transactions are carried out. • CO2: Gives a comprehensive knowledge about

			ways and means of rising of finance by MNC's.
4	MCM4E04	ADVANCED STRATEGIC FINANCIALMANAGEMENT	• CO1: Helps to understand about the framework across strategic analysis, strategy formulation and implementation.
4	MCM4PVO01	PROJECT WORK ANDCOMPREHENSIVE VIVA VOCE	• Quality Research Output and Presentation. The aim of the Project work is to acquire practical knowledge on the implementation of perceptions studied through the programme.

DEPARTMENT OF ENGLISH

Programme Specific Outcomes (PSOs)–M.A. English Language and Literature Programme (2019 Onwards)

	Programme specific outcomes
PSO1	To help learners to improve their proficiency in English by developing their listening, speaking, reading and writing skills for academic and non-academic purposes.
PSO2	To facilitate basic knowledge in English critical tradition from the beginnings to the present and to develop research aptitude by learning literary and cultural theories
PSO3	To get enlightened by reading texts from literatures of English like British Literature, Indian Literature, American Literature and Malayalam Literature in Translation
PSO4	To gain insights into the basic concepts and theoretical frameworks of World Drama, Translation Studies, History of English Language, Linguistics, Postcolonial Writings and Literature and Ecology and to recognize the significance of the cultural, religious, social and historical contexts in which texts are produced and comment on the linguistic diversity they contain.
PSO5	To help learners to improve their proficiency in applying various skills in their personal and professional lives thereby enhancing their employability prospects.

Core, Elective And Audit Courses: Course Outcomes

Semester	Course Code	Course Name	Course outcomes
I	ENG1CO1	Core Course-I: British Literature from Chaucer to Eighteenth Century	• Learners become familiar with the various movements and the great classics in British Literature from the age of Chaucer to the 18th century and get enlightened by the experience of reading and analyzing them.
	ENG1CO2	Core Course-II: British Literature: Nineteenth Century	• Learners get acquainted with the great classics and various movements of the 19th century British Literature with a critical bent of mind.
	ENG1CO3	Core Course-III: History of English Language	• Learners are able to study the origin, evolution, and growth of English language over the ages by understanding its phonetic, syntactic and semantic structures.

	ENG1CO4	Core Course-IV: Indian Literature in English	• Learners become familiarized with the English used by the various Indian writers who write in English, get exposed to the constraints and challenges encountered in articulating Indian sensibility in English and acquainted with a wide range of Indian texts from poetry, fiction, drama and prose writings in English.
	ENG1AO1	Audit Course-I: A01 Writing Skills	• Learners improve their writing skills which help them in developing the linguistic, cognitive and logical skills required in writing different types of essays, anecdotes, academic papers and reports.
II	ENG2CO5	Core Course-V: Twentieth Century British Literature up to 1940	• Learners develop a sound understanding of genres, authors, and ideas by a close reading of the representative texts of the period.
	ENG2CO6	Core Course-VI: Literary Criticism and Theory – Part1 (Up to New Criticism)	• Learners get introduced to the key texts, figures and ideas in the development of literary theory and criticism from the classical to New Criticism which in turn enhance the research spirit in them.
	ENG2CO7	Core Course-VII: American Literature	• Learners are initiated to a critical knowledge of the major literary innovations and cultural issues of America by understanding the character and ethos of the American literature through representative texts.
	ENG2CO8	Core Course-VIII: Postcolonial Writings	• Learners get familiar with the issues and themes in Postcolonial writings as well as the literary concepts of Postcolonialism keeping in mind some of the prominent questions that have come to define postcoloniality such as the question of history, modernity, identity and language.
	ENG2A02	Audit Course-II: Translation Theory and Practice	• Learners get familiarized with the core of translation theory and some of the current theoretical positions which help them to develop practical skills in the translation of literary and non-literary texts.
III	ENG3CO9	Core Course-IX: Twentieth Century British Literature: Post 1940	• Learners get exposed to an experience of Post 1940 British Literature and to critically analyse the latest developments through select texts from different genres.
	ENG3C10	Core Course-X: Literary Criticism and Theory – Part 2	• Learners get insights into Structuralism, Post-Structuralism/ Deconstruction, Psychoanalytic Criticism, Feminism, Cultural

			Materialism/New Historicism, Postcolonialism, Ecocriticism and how to critique theory.
	ENG3EO4	Elective Course– I: Introduction to Linguistics	• Learners get to know about the various schools of linguistics and levels of linguistic analysis- Phonology, Morphology, Syntax and Semantics which help them to understand the relationship between linguistics and related disciplines.
	ENG3EO7	Elective Course– II: World Drama	• Learners are given a bird's eye-view of the dramatic changes that took place in the World Drama and helped to read the plays as being representative products of their milieu by juxtaposing these against their political and socio-cultural contexts.
IV	ENG4C11	Core Course-XI: English Literature in the 21st Century	• Learners get exposed to experience 21st British Literature and to critically analyse the latest advances through select texts from various genres.
	ENG4C12	Core Course XII: Dissertation/ Project	• Learners get a space to express their creative talent based on the knowledge and skills they have acquired through their dissertations, which in turn equip them for advanced literary research.
	ENG4C13	Core Course XIII: Comprehensive Viva Voce	• It enables the learners to demonstrate their ability to participate in academic discussions anddefend their Dissertation/ Project and other queries related to their entire PG Programme verbally which give confidence to attend placement interviews later.
	ENG4E12	Elective Course– III: Literature and Ecology	• Learners get exposed to the scopes of green poetics and green cultural studies through a variety of ecologically conscious literary works and equipped them with an understanding of current global environmental issues.
	ENG4E18	Elective Course– IV: Malayalam Literature in English Translation	• Learners get familiarized with the movements and trends in Malayalam Literature since the 1970s from the select texts of Malayalam Literature in Translation irrespective of poetry, fiction, drama and prose reflecting Kerala culture and aesthetics.

DEPARTMENT HISTORY

Programme Specific Outcomes (PSOs) – MA History Programme

	Programme specific outcomes
PSO1	To understand the cultural heritage and cultural past of the world especially India and Kerala .
PSO2	To understand the changing historiographical trends in the world and formulate critical thinking among the students. To familiarize various theories to the students.
PSO3	To understand the methodology of writing History – various steps precautions, uses and opportunities of historical writing .
PSO4	Give a deep understanding of local history – new sense of exploration of the local past – identify the historical value and importance of the locality.

Course Outcomes

Semester	Course Code	Course Name	Course outcomes
I	HIS 1C01	Method Of Historical Research	• CO1:Describe what is historical research
			• CO2:Explain the importance of historical research
			• CO3:Explain the importance of social research and historical research and differentiate between the two
			• CO4:Formulation of Research problem and the process of selection of a topic
			• Co5:Arrangement of data , collection of sources, specification of sources as primary and secondary, how to use the primary and secondary sources for writing history.
			• CO6:Research in practice, to understand the various methods of notes taking, how to analyse the sources and the importance of textual criticism.
			• CO7:How to write a research report And various methods of explanation. Understand the importance of hypothesis and Analytical writing.
			• CO8:Understand the problems of plagiarism and Ghost writing, methods of checking plagiarism.

			• CO9:How to prepare the final draft of the research paper.
I	HIS 1C02	Pre-Modern Kerala: Problems And Perspectives	• CO1: Define and Distinguish the sources in Ancient Kerala History.
			• CO2:Locate the early settlements in Kerala. To know the life activities and multiple economies in early historic Iron age Kerala. Interpret the political , social , cultural and economic formation in Ancient and Medieval Kerala
			• CO3:To understand the polity and society of Perumal Era
			• CO4: To know the polity and society of Post Perumal period .To assess the circumstances of the advent of Europeans
I	HIS 1CO3 -	Problems, Perspectives And Debates In Early Indian History	• CO1:To understand different perspectives of Indian History.
			• CO2:To understand how state and society reflected in colonial historical writings.
			• CO3:To analyze the different interpretations of colonial, national and Marxist writings about Indian history.
			• CO4:To understand recent trends and approaches in Indian history.
			• CO5:To elucidate the nature of state and society in early vedic period.
			• CO6:To understand the nature of Harappan state and westerly trade.
			• CO7:Critically evaluating the Aryan problem with different hypothesis like invasion and migration.
			• CO8:To know the process of transition from lineage to state through its recent interpretations.
			• CO9:To understand the political structure of Mahajanapadas and identifying the importance of Mauryan state through the interpretations.

			• CO10:Analyse the nature of Gupta state and how the era transformed into Golden Age of early medieval India.
			• CO11:Identifying the war and violence during vedic period
			• CO12:To know about different ideologies in early India which derived from the Buddhism and Jainism.
I	HIS 1C04 -	Early Bronze And Iron Age Civilizations	• CO1:Is to know the history of different cultures of the world during the Early Bronze and the Iron Ages.
			• CO2:Is to comprehend the contributions of the civilizations in the fields of art, architecture, writing etc.
			• CO3:Is to illuminate the archeological explorations pertaining to these cultures of the world.
			• CO4:Is to assess the value of the system of governments during the period
			• CO5:Is to appreciate the greatness of the then cultures.
II	HIS 2C01-	History And Theory	• CO1:Understanding the idea of enlightenment and explaining the perceptions of historical past through Vico, Hume and Herder.
			• CO2:Elucidating the ideas of Romanticism, Postivism and Nationalism and its criticisms.
			• CO3:Describing the philosophy of History through classical social theories and inferring the ideologies of Weber, Durkheim and Marx.
			• CO4: Understanding the idea of Marxism along with Historical materialism, mode of production.
			• CO5:Explaining the new aspects in discipline of history as social history, historical anthropology and new historicism.
			• CO6:Understanding the Annales school of historiography along with the agenda of total history and Braudelian concept of structures.
			• CO7:Describing new narrative trends in history like history from below, history of

			mentalities and emotions, history of oppression, gender history, history of slavery and history of south Asian caste system.
			• CO8:Identifying the methodological debates in historical writing by the ideas of individualism and holism, essentialism and relativism, truth and objectivity and experience and theory in Indian scenario.
			• CO9:Analyzing the contemporary trends in the discipline of history through the ideological arguments of Focult's history of power, Bourdieu's reflexive social science.
II	HIS 2C02	History Of Modern Kerala: Problems And Perspectives	• CO1:Is to make a clear picture of the colonial historiography in Kerala.
			• CO2:Is to clarify the contributions of early administrators of colonial government in Kerala
			• CO3:Is to explicate the works of Christian missionaries for the emergence of the modern historiography in Kerala
			• CO4:Is to identify the personalities associated with the search for primary sources.
			• CO5:Is to grasp the development of colonial ethnography in Kerala
			• CO6:Is to extract an idea on the Environmental history in Kerala
			• CO7:Is to make a grip on the development of Gender and Women histories in Kerala
			• CO8:Is to realize the changes that had occurred in the society and that of the economy with the Mysorean intervention in eighteenth century
			• CO9:Is to bring in a clarity in the contribution and the role of the socio-religious reform movements in Kerala
			• CO10:s to understand the rise and growth of the national movement in Kerala in depth
			• CO11:s to bring in awareness about the developmental experiences in Kerala

II	HIS 2C03 -	State And Society In Medieval India	• CO1:To understand the historiography of Medieval India
			• CO2:To identify and analyse the state and economy in Medieval India
			• CO3:To understand the religion and social stratification in Medieval India
			• CO4:To identify the development of science and technology in Medieval India. To comprehend the cultural encounters in Medieval India
II	HIS 2C04 -	Selected Problems Of Medieval And Modern World History	• CO1:Understand the various trends prevailed in medieval Europe – feudalism – causes of emergence- pattern of feudal society – cultural trends
			• CO2:Understand the medieval European religion and culture – aspects of Christianity and Islam
			• CO3:Causes for the emergence of capitalism and the transition from feudalism to capitalism.
			• CO4:Understand the various debates of transition from feudalism to capitalism
			• CO5:Emergence of various intellectual trends- how renaissance and reformation make its impact in medieval society
			• CO6:Understand the term colonization its impact on the world
			• CO7:Understand the colonization in asia
			• CO8:Colonization in Chaina
			• CO9:Study the process of colonization in America
			• CO10:The emergence of National movements in the world.

DEPARTMENT OF SOCIOLOGY

Programme Specific Outcomes (PSOs) –Sociology Programme

- At the end of the two year M.A. course in which students not only take classes in all the important sub-disciplines of the subject but also attend a rigorous tutorial programme, they will not only have a comprehensive knowledge of important concepts and issues in sociology and society at large but will have also developed skills such as critical thinking, and the ability to formulate cogent arguments which will give them an edge in any profession that they wish to pursue.

Course outcomes

Semester	Course code	Course name	Course Outcomes
I	SOC1 C01	Foundations Of Sociological Theory	• Traces out the history of sociology • Introduces the ideas of the pioneering sociological thinkers • Recognises the relevance of the classical theory in contemporary societies
	SOC1 C02	Research Methodology Of Sociology	• To familiarize the students with quantitative and qualitative research • To understand the steps and stages of research • To inculcate research aptitude in the students
	SOC1C03	Sociology Of Indian Society	• To introduce the different approaches to the study of Indian Society • To discuss the different issues of Indian society • To analyze the transformations in Indian society
	SOC1C04	Rural And Tribal Socities In India	• To acquaint students with basics of rural and tribal societies in our country • To analyze rural and tribal problems • To provide knowledge of rural and tribal social institutions

	SOC 1A01	Audit course 1	• Ability Enhancement programme
II	SOC2C05	Schools Of Sociological Theory -I	• To familiarize with various schools of sociological theory • To enable a critical examination of the major schools of thought • To help recognize the utility and relevance of the theoretical premises
	SOC2C06	Research Methodology-II	• To familiarize with quantitative and qualitative research methods • To familiarize scaling techniques • To familiarize the various components and format of report
	SOC2C07	Urban Sociology	• To familiarize with the basic ideas of Urban Sociology • To discuss issues of urban development • To initiate a critical discussion on Urban society
	SOC2C08	Gender Studies	• To introduce the basic concepts of Gender Studies • To familiarize the theoretical perspectives on Gender • To discuss the Gender dynamics in Indian society • To discuss Gender relations in the context of Kerala society
	SOC2A02	Audit Course 2	• Skill Development Programme
III	SOC3C09	Schools Of Sociological Theory-II	• To familiarize with various schools of sociological theory • To initiate critical discussion on the major schools of thought • To create an awareness on the relevance of the theoretical premises

	SOC3C 10	Sociology Of Development: Themes And Perspectives	• To familiarize the student with conceptual discussions on development • To initiate discussions on the theoretical views of development • To evaluate the Indian experience of development
	SOC3E03	Sociology Of Health	• To provide the basic understanding of health in Social context • To create awareness on the sociological perspectives of Health and Medicine • To familiarize with the activities of World Health Organization • To evaluate health planning policies and programmes in India.
	SOC3E05	Project Planning And Preparation	• To familiarize the students with the basic steps involved in project planning and preparation • To understand the relevance of project planning in contemporary research • To equip the student with the skills necessary for project planning and preparation of a proposal
IV	SOC4 C11	Current Debates In Social Theory	• To familiarise the students with the contemporary debates in social theory • To initiate discussions on the recent theoretical concepts and ideas • To help the students to understand the relevance of theoretical discussions in contemporary society

	SOC4C12	Economic Sociology	• To introduce the basic concepts of Economic Sociology • To familiarize the theoretical perspectives of Economic Sociology • To analyse the impact of Globalization on economy • To understand the relationship between economy and society
	SOC4 E 06	Guidance And Counseling	• To provide a basic understanding about guidance and counseling • To create awareness of the different techniques and the process of counseling • To familiarise with the areas of counseling • To recognize the significance of counseling in contemporary society
	SOC4E07	Kerala Society: Structure And Change	• To familiarise the student with the social structure of Kerala • To analyse the major transformations that have taken place in Kerala • To study about the major movements that have influenced Kerala society • To understand the contemporary Kerala society and its unique features
	SOC4P01	DISSERTATION	

Under Graduate (UG) Programmes

UG Programme Outcomes

- Critical Thinking: Take informed actions after identifying the assumptions that frame our thinking and actions, checking out the degree to which these assumptions are accurate and valid, and looking at our ideas and decisions (intellectual, organizational, and personal) from different perspectives
- Problem Solving: Understand and solve the problems of relevance to society to meet the specified needs using the knowledge, skills and attitudes acquired from humanities/science/arts
- Effective Communication: Speak, read, write and listen clearly in person and through electronic media in English and in one Indian language, and make meaning Effective Communication: Speak, read, write and listen clearly in person and through electronic media in English and in one Indian language, and make meaning of the world by connecting people, ideas, books, media and technology.
- Effective Citizenship: Demonstrate empathetic social concern and equity centered national development, and the ability to act with an informed awareness of issues and participate in civic life through volunteering
- Environment and Sustainability: Understand the issues of environmental contexts and sustainable development.
- Self-directed and Life-long Learning: Acquire the ability to engage in independent and life-long learning in the broadest context of socio technological change

DEPARTMENT OF BOTANY

Programme Specific Outcomes (PSOs) – B. Sc Botany Programme

	Programme specific outcomes
PSO1	Scope and importance of Botany: Understand scope and importance of Botany in every field especially in dealing with societal and environmental issues, agriculture, ethics and healthcare.
PSO2	Environmental concern: Understand the and the role of plants in sustaining life on earth and the interrelationship between human beings and nature, create awareness on natural resources and their importance in sustainable development, analyze the importance of biodiversity conservation, estimate biodiversity loss and develop conservation strategies.
PSO3	Scientific temper: Develop scientific temper and undertake scientific projects.
PSO4	Practical applications: Identify and classify plants according to the principles of plant systematics, apply techniques like plant propagation methods, organic farming, mushroom cultivation, preparation of biofertilizers, biopesticides etc. in daily life.
PSO5	Awareness on life processes: Understand plant life processes, biomolecules, basic hereditary and evolutionary principles.

Course Outcomes

Semester	Course Code	Course Name	Course outcomes
I	BOT1C01T	Angiosperm Anatomy And Microtechnique	• CO1:Explain the types, structure and functions of plant tissues..
			• CO2: Understand the non-living inclusions of plants and their significance.
			• CO3: Differentiate tissues and their functions.
			• CO4: Illustrate primary and secondary (normal and anomalous) structures of plant organs
			• CO5:Explain various developmental details of angiosperms.

			• CO6: Realize the significance and applications of palynology.
			• CO7: Prepare permanent slides, applying the histochemical techniques
II	BOT2B02T	Microbiology, Mycology, Lichenology And Plant Pathology	• CO1:Understand basics of microbial life and their economic importance.
			• CO2:Develop general awareness on the diversity of microorganisms, fungi and lichens.
			• CO3:Analyze the ecological role played by bacteria, fungi and lichens
			• CO4: Identify plant diseases and find out control measures
			• CO5: Realize the significance of plant diseases as far as crop production is concerned.
III	BOT3B03T	Phycology, Bryology And Pteridology	• CO1:Appreciate the diversity and evolutionary significance of lower plant groups
			• CO2: Classify algae, bryophytes and pteridophytes.
			• CO3:Understand the economic and ecological importance of lower plant groups.
IV	BOT4B04T	Methodology And Perspectives In Plant Science	• CO1: Develop scientific temper and problem solving skills.
			• CO2:Undertake scientific projects and prepare project reports
			• CO3: Summarize, organize and display quantitative data and derive conclusions
IV	BOT4B05P	Core Course Practical Paper - I	• CO1: Identification at sight the different types of tissues and vascular bundles. Secondary structures:Dicotstem Anomalous secondary thickening in Boerhaavia, Bignonia and Dracaena Types of ovules: Orthotropous , Anatropous and

			Campylotropous Dicot and monocot embryo of Angiosperms Pollen morphology Viability test for pollen.
			• CO2: Simple staining ,Gram staining –Culture and isolation of bacteria using nutrient agar medium Micropreparation – Lactophenol cotton blue – Slides of the above mentioned types Identification of different forms of Lichens. Usnea : structure of thallus, fruiting body Identification of the disease, pathogen, symptoms and control measures of the following: a. Citrus canker b. Mahali disease c. Tapioca mosaic disease d. Blast of Paddy e. Quick wilt of pepper f. Bunchy top of banana g. Grey leaf spot of coconut
			• CO3 Identification of the vegetative and reproductive structures of the algal types studied. Study of Habit, Anatomy of thallus and reproductive structurwes of Riccia, Anthoceros and Bryum Study of habit, T.S. of stem, C.S. of synangium of Psilotum, Selaginella Equifsetum and Pteris
			• CO4: Work out problems under all types mentioned in the syllabus. Familiarize the technique of data

			representation. Preparation of solutions of known concentrations using pure samples and stock solutions. Preparation of buffers Measurement of pH using pH meter. Demonstration of the working of different kinds of centrifuges Parts of microscope and its operation . Free hand sectioning of stem, leaves, Staining and mounting. Measurement of pollen size using micrometer. Demonstration of dehydration, infiltration, embedding and microtoming.
V	BOT5B06T	Gymnosperms, Palaeobotany, Phytogeography And Evolution	• CO1:Understand the role of gymnosperms as a connecting link between pteridophytes and angiosperms
			• CO2:Appreciate the process of organic evolution.
			• CO3: Realize the importance of fossil study.
			• CO4:Recognize the phytoeographic zones of India.
V	BOT5B07T	Angiosperm Morphology And Systematics	• CO1:Appreciate the diverse morphology of angiosperms.
			• CO2: Identify and classify plants based on taxonomic principles.
			• CO3:Make scientific illustrations of vegetative and reproductive structures of plants
			• CO4:Develop the skill of scientific imaging of plants.
			• CO5: Realize the importance of field study
			• CO6:Change their attitude towards over exploitation of rare/endemic plants.

V	BOT5B08T	Tissue Culture, Horticulture, Economic Botany And Ethnobotany	• CO1:Critically evaluate the advantages of tissue culture and horticulture over conventional methods of propagation.
			• CO2:Apply various horticultural practices in the field.
			• CO3: Experiment on the subject and try to become entrepreneurs.
			• CO4: Identify the economically important plants
V	BOT5B09T	Cell Biology And Biochemistry	• CO1:Appreciate the ultra-structure of a plant cell
			• CO2:Enumerate the functions of each cell organelle
			• CO3:Draw and explain the structure of biomolecules.
V	BOT6B15P	Core Course 15: Practical Paper- II:	• CO1: Details study Cycas- Habit, coralloid root, T.S. of coralloid root, T.S. of leaflet, T.S. of rachis, male cone and L.S. of male cone , microsporophyll, megasporophyll T.S. of microsporophyll, L.S. of ovule and seed. 2. Pinus- branch of unlimited growth, spur shoot, T.S. of stem and needle, male cone and female cone, L.S. of male cone and female cone, seed. 3. Gnetum- Habit, stem T.S., leaf T.S., male and female cones, L.S. of ovule, seed.Study of Fossil Pteridophytes - Rhynia stem, Lepidodendron and Calamites 2 Fossil gymnosperms- Williamsonia practical knowledge on the phytogeographic zones of India.
			• CO2: Identify the types of inflorescence and fruits mentioned in the syllabus. Identification of plants, drawing floraldiagram, floral formula, herbarium preparation techniques

			• CO3: Preparation of nutrient medium – Murashige and Skoog medium using stock solutions. 2. Familiarize the technique of preparation of explants, surface sterilization, inoculation and subculturing. 3. Preparation of synthetic seeds. 4.Demonstration of anther culture. 5.Preparation of nursery bed and polybag filling. 6. Preparation of potting mixture – Potting, repotting. 7. Field work in cutting, grafting, budding, layering (drawing not required). 8. Familiarizing gardening tools and implements. 9. Establishment of vegetable garden Students shall be able to identify plants or plant products (raw or processed) and shall be able to write Botanical names, Family and morphology of useful parts of source plants Students are expected to identify the plants mentioned in the Ethnobotany syllabus
			• CO4: Mitosis - Acetocarmine squash preparation of Onion root tip. 2. Calculation of mitotic index 3. Demonstration of meiosis in Rhoeo/ Chlorophytum/ Maize and identification of different stages of Meiosis. Qualitative tests for monosaccharides, and reducing non reducing oligosaccharides, starch, amino acids and protein Quantitative estimation of

			protein by Biuret method Quantitative estimation of DNA and RNA by colorimetric/ spectrophotometric method Colorimetric estimation of reducing sugars in germinating seeds
V	BOT5D03T	Basic Tissue Culture	• CO1:Understand plant tissue culture as a rapid propagation method.
			• CO2: Explain the steps involved in tissue culture.
			• CO3: Realize the applications of plant tissue culture
VI	BOT6B10T	Genetics And Plant Breeding	• CO1:Appreciate the facts behind heredity and variations.
			• CO2:Understand the basic principles of inheritance.
			• CO3: Solve problems related to classical genetics.
			• CO4:Predict the pattern of inheritance
			• CO5: Understand various plant breeding techniques
VI	BOT6 B11T	Biotechnology, Molecular Biology And Bioinformatics	• CO1:Analyze the role of biotechnology in daily life.
			• CO2:Understand the basic aspects of bioinformatics.
			• CO3:Explain the concepts in molecular biology.
VI	BOT6B12T	Plant Physiology And Metabolism	• CO1:Identify the physiological responses of plants.
			• CO2:Analyze the role of external factors in controlling the physiology of plants.
			• CO3:Explain the metabolic processes taking place in each cell.
			• CO4:Appreciate the energy fixing and energy releasing processes taking place in cells.

VI	BOT6B13T	Environmental Science	• CO1:Realize the importance of ecological studies.
			• CO2:Develop environmental concern in all their actions and practise Reduce, Reuse and Recycle.
			• CO3:Try to reduce pollution and environmental hazards and change their attitude towards throwing away plastic wastes
			• CO4:Spread awareness of the need of conservation of biodiversity and natural resources.
			• CO5:Analyze the reasons for climate change and find out ways to combat it.
VI	BOT6 B14T (E3)	Genetics And Crop Improvement	• CO1:Understand various techniques employed for increasing crop productivity
			• CO2: Identify diseases affecting crop plants
			• CO3:Attain general awareness on various crop research stations of the country.
	BOT6B16P	Genetics, Pl. Breeding, Biotechnology, Molecular Biology, Plant Physiology & Environmental Science Practical III	• CO1: work out problems related to the theory syllabus- Monohybrid cross b. Dihybrid cross c. Test cross and back cross d.Determination of genotypic and phenotypic ratios and genotype of parents e. Non epistasis f.Complementary gene interaction g.Epistasis: dominant and recessive h. Polygenic interaction i. Multiple allelism j. Chromosome mapping k. Calculation of Coincidence and interference Techniques of emasculation and hybridization of any bisexual flower.

			2. Floral biology of Paddy, any one Pulse and Coconut tree.
			• CO2: Extraction of DNA from plant tissue. 2. Study of genetic engineering tools and techniques using photographs/diagram (Southern blotting, DNA finger printing, PCR). Familiarizing with the different data bases mentioned in the syllabus. 2. Molecular visualization using Rasmol. 3.Blast search of nucleotide sequences.
			• CO3: Students shFruit ripening/Rooting from cuttings 2. Relation between water absorption and transpiration. 3. Separation of leaf pigments by paper chromatography/ column chromatography /TLC. 4. Effects of light intensity on photosynthesis by Wilmot's bubbler. 5. Thistle funnel osmoscope 6. Ganong's Potometer 7. Ganong's light-screen 8. Ganong's respirometer 9.Kuhne's fermentation vessel 10.Mohl's half-leaf experiment 11. Absorbotranspirometer 12.Demonstration of gravitropism using Klinostat ould familiarize experiments

			• CO4: Construct a food web from the given set of data, 2.Construct ecological pyramids of number, biomass and energy from the given set of data 3.Study of plant communities: Determination of density, abundance, dominance, frequency by quadrat method. 4.Demonstration of determination of Dissolved Oxygen by Winkler's method. 5.Study of morphological and anatomical characteristics of plant groups: Hydrophytes, Xerophytes, halophytes, epiphytes, parasites.

DEPARTMENT OF CHEMISTRY

Programme Specific Outcomes (PSOs) – BSc Chemistry Programme

	Programme specific outcomes
PSO1	To enable the students to understand basic facts and concepts in chemistry and to apply its principles.
PSO2	To appreciate the achievements in chemistry and to know the role of chemistry in nature and in society.
PSO3	To familiarize with the emerging areas of chemistry and their applications in various spheres of chemical sciences and to apprise the students of its relevance in future studies.
PSO4	To develop skills in the proper handling of instruments and chemicals and to familiarize with the different processes used in industries and their applications.
PSO5	To develop an eco-friendly attitude by creating a sense of environmental awareness and to be conversant with the applications of chemistry in day-to-day life.

Course outcomes

Semester	Course Code	Course Name	Course outcomes
I	CHE1B01	Theoretical and Inorganic Chemistry-I	• CO1:To apply the methods of a research project.
			• CO2:To understand the principles behind volumetry.
			• CO3:Toanalyse the characteristics of different elements.
			• CO4:To distinguish between different acid base concepts.
			• CO5:Toanalyse the stability of different nuclei.
II	CHE2B02	Theoretical and Inorganic Chemistry-II	• CO1:To understand the importance and the impact of quantum revolution inscience.
			• CO2:To understand and apply the concept that the wave functions of hydrogen atom are nothing but atomic orbitals.

			• CO3 :To understand that chemical bonding is the mixing of wave functions of thetwo combining atoms.
			• CO4 :To understand the concept of hybridization as linear combination of orbitals of the same atom.
			• CO5:To inculcate an atomic/ molecular level philosophy in the mind.
III	CHE3B03	Physical Chemistry - I	• CO1 :To understand the properties of gaseous state and how it links to thermodynamic systems.
			• CO2 :To understand the concepts of thermodynamics and it's relation to statistical thermodynamics.
			• CO3:To apply symmetry operations to categorize different molecules.
IV	CHE4B04	Organic Chemistry– I	• CO1:To apply the concept of stereochemistry to different compounds.
			• CO2:To understand the basic concepts of reaction mechanism.
			• CO3 :To analyse the mechanism of a chemical reaction.
			• CO4:Toanalyse the stability of different aromatic systems.
IV	CHE4B05 (P)	Inorganic Chemistry Practical – I	• CO1:To enable the students to develop skills in quantitative analysis and preparing inorganic complexes.
			• CO2 :To understand the principles behind quantitative analysis.
			• CO3:To apply appropriate techniques of volumetric quantitative analysis in estimations.
			• CO4 :To analyse the strength of different solutions.

V	CHE5B06	Inorganic Chemistry – III	• CO1 :To understand the principles behind qualitative and quantitative analysis.
			• CO2 :To understand basic processes of metallurgy and to analyse the merits of • different alloys.
			• CO3:To understand the applications of different inorganic polymers.
			• CO4 :Toanalyse different polluting agents.
			• CO5:To apply the principles of solid waste management.
V	CHE5B07	Organic Chemistry – II	• CO1 :To understand the difference between alcohols and phenols.
			• CO2 :To understand the importance of ethers and epoxides.
			• CO3:To apply organometallic compounds in the preparation of different functional groups.
			• CO4 :To apply different reagents for the inter conversion of aldehydes, carboxylic acids and acid derivatives.
			• CO5 :To apply active methylene compounds in organic preparations
V	CHE5B08	PHYSICAL CHEMISTRY – II	• CO1 :To apply the concept of kinetics, catalysis and photochemistry to various chemical and physical processes.
			• CO2:To characterise different molecules using spectral methods.
			• CO3 :To understand various phase transitions and its applications.
V	CHE5D01	Environmental Chemistry	• CO 1: Recall the technical/scientific terms involved in pollution.
			• CO 2: Understand the causes and effects of air pollution.
			• CO 3: Understand the sources, types and effects of water pollution.

			• CO4:Describe water quality parameters.
			• CO5: Know soil, noise, thermal and radioactive pollutions and their effects.
			• CO6:Study various pollution control measures.
			• CO7:Understand the basics of green chemistry.
VI	CHE6B09	Inorganic Chemistry – IV	• CO1 :To understand the principles behind different instrumental methods.
			• CO2:To distinguish between lanthanides and actinides.
			• CO3 :To appreciate the importance of CFT.
			• CO4 :To understand the importance of metals in living systems.
			• CO5 :To distinguish geometries of coordination compounds.
VI	CHE6B10	Organic Chemistry – III	• CO1 :To elucidate the structure of simple organic compounds using spectral techniques.
			• CO2 :To understand the basic structure and tests for carbohydrates.
			• CO3 :To understand the basic components and importance of DNA.
			• CO4:To understand the basic structure and applications of alkaloids and terpenes.
			• CO5:To distinguish different pericyclic reactions.
VI	CHE6B11	Physical Chemistry – III	• CO1:To understand the basic concepts of electrochemistry.
			• CO2 :To understand the importance of colligative properties.
			• CO3:To relate the properties of materials/solids to the geometrical properties and chemical compositions.

VI	CHE6B12	Advanced and Applied Chemistry	• CO1: To understand the importance of nanomaterials
			• CO2:To appreciate the importance of green approach in chemistry.
			• CO3:To understand the uses and importance of computational calculations inmolecular design.
			• CO4:To understand the role of chemistry in human happiness index and lifeexpectancy
VI	CHE6B13(E3)	Medicinal And Environmental Cehmistry	• CO1:To understand the importance of drugs in human health
			• CO2:To understand the facts about common diseases and treatment
			• CO3:To identify the presence of toxic substances in atmosphere
			• CO4:To apply chemistry in treatment of water and sewage.
VI	CHE6B14(P)	Physical Chemistry Practical	• CO1:To enable the students to develop analytical skills in determining the physical properties (physical constants).
			• CO2 : To develop skill in setting up an experimental method to determine the physical properties
			• CO3: To understand the principles of Refractometry, Potentiometry and Conductometry.
VI	CHE6B15(P)	Organic Chemistry Practical	• CO1: To enable the students to develop analytical skills in organic qualitative analysis.
			• CO2 : To develop talent in organic preparations to ensure maximum yield

			• CO3: To apply the concept of melting or boiling points to check the purity of compounds
			• CO4 : To analyse and characterise simple organic functional groups.
			• CO5: To analyse individual amino acids from a mixture using chromatography
VI	CHE6B16(P)	Inorganic Chemistry Practcal-II	• CO1: To enable the students to develop analytical skills in inorganic quantitative analysis.
			• CO2 : To understand the principles behind gravimetry and to apply it in quantitative analysis
			• CO3: To understand the principles behind colorimetry and to apply it in quantitative analysis
VI	CHE6B17(P)	Inorganic Chemistry Practcal-III	• CO1:To enable the students to develop skills in inorganic qualitativeanalysis.
			• CO2: To understand the principles behind inorganic mixture analysis and to apply it in qualitative analysis.
			• CO3:To analyse systematically mixtures containing two cations and two anions.
VI	CHE6B18(Pr)	Project Work	• CO1 : To understand the scientific methods of research project.
			• CO2:To apply the scientific method in life situations.
			• CO3:To analyse scientific problems systematically.

DEPARTMENT OF MATHEMATICS

Program Specific Outcomes (B.Sc Mathematics)

PSO1:	Be familiar with different areas of Mathematics .
PSO2:	Be prepared to use Mathematics, not only in the discipline of Mathematics, but also in other disciplines and in their future endeavours.
PSO3:	Develop the skills necessary to formulate and understand proofs and to provide justification.
PSO4:	Acquire good knowledge and understanding in advanced areas of mathematics and statistics, chosen by the student from the given courses
PSO5:	Be able to solve problems using a broad range of significant mathematical techniques
PSO6:	Be a life-long learner who is able to independently expand his/her mathematical or statistical expertise when needed

Course outcomes

SEMESTER	COURSE CODE	COURSE NAME	COURSE OUTCOMES
1	MTS1 BO1	BASIC LOGIC & NUMBER THEORY	• CO1:Prove results involving divisibility, greatest common divisor, least common multiple and a few applications
			• CO2: Understand the theory and method of solutions of LDE.
			• CO3: Understand the theory of congruence and a few applications.
			• CO4: Learn three classical theorems viz. Wilson's theorem, Fermat's little theorem and Euler's theorem and a few important consequences.

2	MTS2 BO2	CALCULUS OF SINGLE VARIABLE-1	• CO1: Introduces fundamental ideas of limit, continuity and differentiability and also to some basic theorems of differential calculus
			• CO2: Deal with the other branch of calculus viz. integral calculus. Historically, it is motivated by the geometric problem of finding out the area of a planar region
			• CO3: Discuss the definite integral not only solves the area problem but is useful in finding out the arc length of a plane curve, volume and surface areas of solids and so on
			• CO4: Solve problems in a range of mathematical applications using the derivative or the integral;
3	MTS3 BO3	CALCULUS OF SINGLE VARIABLE-2	• CO1:Get the idea of parameterization of curves, they learn how to calculate the arc length, curvature etc
			• CO2:Introduced into other coordinate systems which often simplify the equation of curves and surfaces and the relationship between various coordinate systems
			• CO3: Enables them to directly calculate the arc length and surface areas of revolution of a curve whose equation is in polar form

			• CO4: Will be able to handle vectors in dealing with the problems involving geometry of lines, curves, planes and surfaces in space and have acquired the ability to sketch curves in plane and space given in vector valued form.
4	MTS4BO4	LINEAR ALGEBRA	• CO1: Deals with A number of methods for solving a system of linear equations are discussed
			• CO2: Understand the modern view of a matrix as a linear transformation.
			• CO3: Familiarity of the students with planar vectors and their algebraic properties under vector addition and scalar multiplication will make them realize that the idea of a general vector space is in fact an abstraction of what they already know.
			• CO4: The idea of a subspace, spanning vectors, basis and dimension are discussed and fundamental results in these areas are explored.
			• CO5: Practical method of finding out the eigen values from the characteristic equation and the corresponding eigenvectors are also discussed
			• CO6: In this process, students realise that every symmetric matrix is diagonalizable and that this diagonalization can be done in a

			special way ie., by choosing an orthogonal matrix to perform the diagonalization.
5	MTS5BO5	THEORY OF EQUATIONS AND ABSTRACT ALGEBRA	• CO1: Explain different methods like Descartes Method, Cardan's method, Ferrari's method in theory of equations
			• CO2: Demonstrate understanding of and the ability to verify relationships between operations satisfying various properties (e.g. commutative property)
			• CO3: Extend group structure to finite permutation groups (Cayley's Theorem).
			• CO4: Acquire the basic knowledge and the structure of Group, Subgroup and Cyclic Groups
			• CO5: Use Lagrange's Theorem to analyse the cyclic subgroups of a group
			• CO6: Describe the characteristics of a ring, quotient rings and ideals and also Familiarize with Rings, Integral Domains, Fields and Divisors of Zero
5	MTS5 BO6	BASIC ANALYSIS	• CO1:Have the knowledge of real functions-limits of functions and their properties.
			• CO2:Studying the notion of continuous functions and their properties.
			• CO3: Studying the differentiability of real functions and related theorems.

			• CO4:Can flexibly apply mathematical methods of fundamental component areas of mathematics and are able to transfer the findings obtained to other component areas or applications.
			• CO5:Determine the Riemann integrability and the Riemann-Stieltjes integrability of a bounded function and prove a selection of theorems concerning integration,
			• CO6: Ability to prove the limit of a sequence, to determine whether a sequence converges or not, to prove the limit of a function, to determine whether or not a function is continuous
			• CO7: Ability to handle abstract ideas of Mathematics and Mathematical proofs
5	MTS5 BO7	NUMERICAL ANALYSIS	• CO1: Demonstrate understanding of common numerical methods and how they are used to obtain approximate solutions to otherwise intractable mathematical problems.
			• CO2: Apply numerical methods to obtain approximate solutions to mathematical problems.
			• CO3: Derive numerical methods for various mathematical operations and tasks, such as interpolation, differentiation, integration, the solution of linear and nonlinear

			equations, and the solution of differential equations.
			• CO4: Analyse and evaluate the accuracy of common numerical methods.
6	MTS6B1O	REAL ANALYSIS	• CO1: Have the knowledge of basic properties of the field of real numbers.
			• CO2: Have the knowledge of the series of real numbers and convergence.
			• CO3: Determine the Riemann inerrability and the Riemann-Stieltjes inerrability of a bounded function and prove a selection of theorems concerning integration,
			• CO4: Studying the basic topological properties of the real numbers
			• CO5:Ability to use tests of convergence to determine whether or not a series converges, determine whether a power series converges and also determine its radius of convergence
			• CO6: Provide a rigorous development of the fundamental ideas of Calculus
5	MTS5 BO9	INTRODUCTION TO GEOMETRY	• CO1: Understand several basic facts about parabola, hyperbola and ellipse (conics) such as their equation in standard form, focal length properties, and reflection properties, their tangents and normal.

			• CO2:Understand affine transformations, the inherent group structure, the idea of parallel projections and the basic properties of parallel projections and fundamental theorem of affine geometry, its use in the proof of Median theorem, Ceva's theorem, Menelaus' theorem etc.
			• CO3: Understand the idea of homogeneous coordinate of a point in projective plane and write down the equation of a line in projective plane passing through two homogeneous coordinates
			• CO4: Appreciate the advantage of interpreting a Euclidean theorem as a projective theorem by learning a simpler proof for Desargues and Papua's theorem
6	MTS6B1O	REAL ANALYSIS	• CO1: Have the knowledge of basic properties of the field of real numbers.
			• CO2: Have the knowledge of the series of real numbers and convergence.
			• CO3:Determine the Riemann integrability and the Riemann-Stieltjes integrability of a bounded function and prove a selection of theorems concerning integration,
			• CO4: Studying the basic topological properties of the real numbers

			• CO5:Ability to use tests of convergence to determine whether or not a series converges, determine whether a power series converges and also determine its radius of convergence
			• CO6: Provide a rigorous development of the fundamental ideas of Calculus
6	MTS6 B11	COMPLEX ANALYSIS	• CO1: Demonstrate understanding of the basic concepts underlying complex analysis.
			• CO2: Introduce elementary complex functions and Find all integral roots and all logarithms of nonzero complex numbers
			• CO3: Understand the significance of differentiability for complex functions and be familiar with the Cauchy-Riemann equations
			• CO4:Apply the concept and consequences of analyticity and the Cauchy-Riemann equations and of results on harmonic and entire functions including the fundamental theorem of algebra
			• CO5: Evaluate integrals along a path in the complex plane and understand the statement of Cauchy's Theorem and Use Cauchy's integral theorem and formula to compute line integrals

			• CO6: Represent functions as Taylor, power and Laurent series, classify singularities and poles, find residues and evaluate complex integrals using the residue theorem
6	MTS6 B12	CALCULUS OF MULTI VARIABLE	• CO1: Understand several contexts of appearance of multivariable functions and their representation using graph and contour diagrams.
			• CO2: Understand the notion of partial derivative, their computation and interpretation and Understand chain rule for calculating partial derivatives.
			• CO3:Get the idea of directional derivative, its evaluation, interpretation, and relationship with partial derivatives. · Understand the concept of gradient, a few of its properties, application and interpretation.
			• CO4:See a few applications of double and triple integral in the problem of finding out surface area, mass of lamina, volume, centre of mass and so on.
			• CO5: Learn three major results viz. Green's theorem, Gauss's theorem and Stokes' theorem of multivariable calculus and their use in several areas and directions.

6	MTS6 B13	DIFFERENTIAL EQUATIONS	• CO1:Identify, analyse and subsequently solve physical situations whose behaviour can be described by ordinary differential equations and Understand the order, degree and various standard forms of differential equations
			• CO2: Determine solutions to second order linear homogeneous differential equations with constant coefficients
			• CO3: Determine solutions to second order linear non-homogeneous differential equations with constant coefficients, Evaluate and apply linear differential equations of second order (and higher)
			• CO4: Describe the origin of partial differential equation and distinguish the integrals of first order linear partial differential equation into complete, general and singular integrals
			• CO5: Be competent in solving linear PDEs using classical solution methods
6	MTS6 B14 (EO1)	GRAPH THEORY	• CO1: Acquire a basic idea of graph, various terms associated and matrix representations of graphs
			• CO2: Familiarize with different types of graphs, connectivity and properties
			• CO3:Identify vertices, edges and paths with specific properties such as cut vertices, bridges, Eulerian, etc

Complimentary Courses

SEMESTER	COURSE CODE	COURSE NAME	COURSE OUTCOMES
1	MTS1 C01	MATHEMATICS-1	• C01: Introduces fundamental ideas of limit, continuity and differentiability and also to some basic theorems of differential calculus
			• C02: Discuss the definite integral not only solves the area problem but is useful in finding out the arc length of a plane curve, volume and surface areas of solids and so on
			• C03: Be able to graph the function using the properties of y' and y''
2	MTS2 C02	MATHEMATICS-2	• C01:To learn conversion from cartesian to polar coordinates and vice versa. Graphing in polar coordinates
			• C02:Study hyperbolic function and inverse hyperbolic functions. Learn to find arc length and surface area, area between two curves.
			• C03:Study improper integrals, numerical integration, sequences and series and various methods to test their convergences
			• C04:Define power series, Maclaurin series and Taylor series and study their convergence and estimate error
			• C05:Learn concept of vector spaces, solving systems of linear equations by different methods, to learn matrices and its various properties

3	MTS3 C03	MATHEMATICS - 3	• C01:To learn about vector functions, partial derivatives and directional derivatives, curl and divergence
			• C02:Familiarize with line integrals
			• C03: Study Double integral and its applications
			• C04: Study Triple integrals
			• C05:Learn basic concepts in complex analysis
4	MTS4 C04	MATHEMATICS-4	• C01:To learn Ordinary differential equations and their solutions
			• C02:Study different methods to solve linear differential equations.
			• C03: Study Laplace transforms and Fourier series
			• C04:Learn basics of Partial differential equations and familiarize with some of its applications
			• C05:Learn concept of vector spaces, solving systems of linear equations by different methods, to learn matrices and its various properties

DEPARTMENT OF PHYSICS

Programme Specific Outcomes (PSOs) – B. Sc Applied Physics (2019 Admissions)
Programme

	Programme specific outcomes
PSO1	Understand the basic concepts of methodology of science and the fundamentals of mechanics, properties of matter and electrodynamics
PSO2	Understand the theoretical basis of quantum mechanics, relativistic physics, nuclear physics, optics, spectroscopy, solid state physics, astrophysics, statistical physics, photonics and thermodynamics
PSO3	Understand and apply the concepts of electronics in the designing of different analog and digital circuits
PSO4	Understand the basics of computer programming and numerical analysis
PSO5	Apply and verify theoretical concepts through laboratory experiments

Course Outcomes

Semester	Course Code	Course Name	Course outcomes
I	APH1B01	METHODOLOGY OF SCIENCE AND BASIC MECHANICS	• CO1-Understand the features, methods and limitations of science
			• CO2- Understand and apply the basic concepts of Newtonian Mechanics to physical systems
			• CO3- Understand and apply the basic idea of work-energy theorem to physical systems
			• CO4- Understand and apply the rotational dynamics of rigid bodies
			• CO5- Understand the basic ideas of elasticity
II	APH2B02	MECHANICS	• CO1-Understand the features of non-inertial systems and fictitious forces
			• CO2- Understand and analyze the features of central forces with respect to planetary motion
			• CO3- Understand the basics ideas of harmonic oscillations
			• CO4-Understand and analyze the basics concepts of wave motion
III	APH3B03	ELECTRODYNAMICS I	• CO1- Understand and apply the fundamentals of vector calculus

			• CO2- Understand and analyze the electrostatic properties of physical systems
			• CO3- Understand the mechanism of electric field in matter.
			• CO4- Understand and analyze the magnetic properties of physical systems
			• CO5- Understand the mechanism of magnetic field in matter.
III	A11	PYTHON	• CO1- Understand various statements, data types and functions in Python
			• CO2- Develop programs in Python programming language
			• CO3- Understand the basics of Object oriented programming using Python
III	A12	SENSORS AND TRANSDUCERS	• CO1- Explain resistance, inductance and capacitance transducers.
			• CO2-Perceive the concepts of temperature and pressure transducers.
			• CO3- Perceive the concepts level transducers such as and flow transducers
			• CO4-Explain Electromagnetic transducers and radiation sensors
			• CO5- Explain force and torque transducers and sound transducers
IV	APH4B04	ELECTRODYNAMICS II	• CO1- Understand the basic concepts of electrodynamics
			• CO2- Understand and analyze the properties of electromagnetic waves
			• CO3- Understand the behavior of transient currents
			• CO4- Understand the basic aspects of ac circuits
			• CO5- Understand and apply electrical network theorems
IV	A13	DATA COMMUNICATION & OPTICAL FIBERS	• CO1- Understand the fundamentals of transmission
			• CO2- Understand the multiplexing
			• CO3-Understand the different protocols regarding data link

			• CO4- Understand the fundamentals of OFC
IV	A14	MICROPROCESSORS – ARCHITECTURE AND PROGRAMMING	• CO1- Understand the fundamentals of a microcomputer
			• CO2- Understand the microprocessor programming
			• CO3- Understand the fundamentals of Microprocessor architecture
			• CO4-Understand the basics of INTEL 8085
			• CO5- Understand various controls of INTEL 8085,8086
IV	APH4B05(1)	PRACTICAL-I(1)	• CO1-Apply and illustrate the concepts of properties of matter through experiments
			• CO2-Apply and illustrate the concepts of electricity through experiments
			• CO3-Apply and illustrate the concepts of optics through experiments
			• CO4-Apply and illustrate the principles of magnetism through experiments
IV	APH4B05(2)	PRACTICAL-I(2)	• CO1-Apply and illustrate the concepts of optics through experiments
			• CO2-Apply and illustrate the concepts of electricity through experiments
			• CO3-Apply and illustrate the concepts of thermodynamics through experiments
			• CO4-Apply and illustrate the principles of magnetism through experiments
V	APH5B06	COMPUTATIONAL PHYSICS	• CO1-Understand the Basics of Python programming
			• CO2- Understand the applications of Python modules
			• CO3-Understand the basic techniques of numerical analysis

			• CO4-Understand and apply computational techniques to physical problems
V	APH5B07	QUANTUM MECHANICS	• CO1-Understand the particle properties of electromagnetic radiation
			• CO2- Describe Rutherford – Bohr model of the atom
			• CO3-Understand the wavelike properties of particles
			• CO4-Understand and apply the Schrödinger equation to simple physical systems
			• CO5- Apply the principles of wave mechanics to the Hydrogen atom
V	APH5B08	OPTICS	• CO1- Understand the fundamentals of Fermat‟s principles and geometrical optics
			• CO2- Understand and apply the basic ideas of interference of light
			• CO3- Understand and apply the basic ideas of diffraction of light
			• CO4- Understand the basics ideas of polarization of light
			• CO5- Describe the basic principles of holography and fibre optics
V	APH5B09	ELECTRONICS (ANALOG & DIGITAL)	• CO1-Understand the basic principles of rectifiers and dc power supplies
			• CO2- Understand the principles of transistor
			• CO3- Understand the working and designing of transistor amplifiers and oscillators
			• CO4- Understand the basic operation of Op – Amp and its applications
			• CO5- Understand the basics of digital electronics
V	APH5D01(1)	NONCONVENTIONAL ENERGY SOURCES	• CO1- Understand the importance of non conventional energy sources
			• CO2- Understand basic aspects of solar energy
			• CO3- Understand basic principles of wind energy conversion

			• CO4-Understand the basic ideas of geothermal and biomass energy and recognize their merits and demerits
			• CO5- Understand the basic ideas of oceans and chemical energy resources and recognize their merits and demerits
VI	APH6B10	THERMODYNAMICS	• CO1- Understand the zero and first laws of thermodynamics
			• CO2-Understand the thermodynamics description of the ideal gas
			• CO3- Understand the second law of thermodynamics and its applications
			• CO4- Understand the basic ideas of entropy
			• CO5- Understand the concepts of thermodynamic potentials and phase transitions
VI	APH6B11	STATISTICAL PHYSICS, SOLID STATE PHYSICS, SPECTROSCOPY & PHOTONICS	• CO1-Understand the basic principles of statistical physics and its applications
			• CO2- Understand the basic aspects of crystallography in solid state physics
			• CO3- Understand the basic elements of spectroscopy
			• CO4- Understand the basics ideas of microwave and infra red spectroscopy
			• CO5-Understand the fundamental ideas of photonics
VI	APH6B12	NUCLEAR PHYSICS AND PARTICLE PHYSICS	• CO1- Understand the basic aspects of nuclear structure and fundamentals of radioactivity
			• CO2- Describe the different types of nuclear reactions and their applications
			• CO3- Understand the principle and working of particle detectors
			• CO4- Describe the principle and working of particle accelerators
			• CO5 Understand the basic principles of elementary particle physics

VI	APH6B13	RELATIVISTIC MECHANICS AND ASTROPHYSICS	• CO1-Understand the fundamental ideas of special relativity
			• CO2- Understand the basic concepts of general relativity and cosmology
			• CO3-Understand the basic techniques used in astronomy
			• CO4-Describe the evolution and death of star
			• CO5-Describe the structure and classification of galaxies
VI	APH6B14 (EL2)	MICROPROCESSOR AND MICROCOMPUTER SYSTEMS	• CO1- Understand the fundamentals of a microcomputer.
			• CO2-Understand the different number systems
			• CO3- Understand the fundamentals of Microprocessor architecture
			• CO4-Understand the basics of INTEL 8085
			• CO5 Understand the instructions and various controls of INTEL 8085
VI	APH6B15:	PRACTICAL II	• CO1-Apply and illustrate the principles of semiconductor diodes and transistors through experiments
			• CO2-Apply and illustrate the principles of transistor amplifier and oscillator through experiments
			• CO3-Apply and illustrate the principles of digital electronics through experiments
			• CO4-Analyze and apply computational techniques using C programming
VI	APH6B16	PRACTICALS III	• CO1- Apply and illustrate the ideas of Network theorems through experiments
			• CO2-Apply and illustrate the concepts of multivibrators through experiments
			• CO3- Apply and illustrate the ideas of Operational amplifiers through experiments
			• CO4- Apply and illustrate the ideas of digital electronics through experiments

VI	APH6B17(P)	PROJECT	• CO1-Understand research methodology
			• CO2- Understand and formulate a research project
			• CO3- Design and implement a research project
			• CO4- Identify and enumerate the scope and limitations of a research project

DEPARTMENT OF ZOOLOGY

Programme Specific Outcomes (PSOs) – B. Sc Zoology Programme

	Programme specific outcomes
PSO1	Understand the biological diversity and grades of complexity of various animal forms through their systematic classification and process of organic evolution
PSO2	Understand the roles of plants, animals and microbes in the sustainability of the environment and their interaction among themselves and deterioration of the environment due to anthropogenic activities.
PSO3	Understand the concepts and principles of biochemistry, immunology, physiology, ethology, endocrinology, developmental biology, cell biology, genetics, molecular biology and microbiology and develop technical skills in biotechnology, bioinformatics and biostatistics
PSO4	Perform laboratory procedures as per standard protocols in the areas of animal diversity, systematics, cell biology, genetics, biochemistry, molecular biology, microbiology, physiology, immunology, developmental biology, environmental biology, ethology, evolution and science methodology,

Course Outcomes

Semester	Course Code	Course Name	Course outcomes
I	ZOL1B01T	Animal Diversity: Non-Chordata Part- I	• CO1:Describe the principles of classification and nomenclature
			• CO2:Explain the five kingdom classification of living organisms
			• CO3:Understand the concepts of classification of animals
			• CO4:Explain the classification with examples and characteristic features of kingdom Protista and describe the morphology and structural organization of Paramecium
			• CO5:Describe the characteristic features of subkingdom Mesozoa
			• CO6: Explain the classification of phylum Porifera and elucidate the salient features of each class
			• CO7:Describe the characteristic features of phylum Cnidaria and Ctenophora,illustrate the

			classification of phylum Cnidaria down to classes and explain the structural organization of Obelia
			• CO8:Explain the salient features of phylum Platyhelminthes and illustrate its classification down to classes
			• CO9:Explain the characteristic features and classification of super-phylum Aschelminthes and phylum Nematoda
			• CO10:Elucidate the characters of Pseudocoelomate minor phyla Rotifera and Gastrotricha
II	ZOL2B02T	Animal Diversity: Non-Chordata Part – II	• CO1: Explain the classification with examples and characteristic features of phylum Annelida and describe the morphology and structural organization of Neanthes
			• CO2:Describe the distribution, peculiarities and affinities of phylum Onychophora
			• CO3:Explain the classification of phylum Arthropoda;elucidate the salient features of each class and describe the morphology and structural organization of Penaeus
			• CO4:Describe the characteristic features of phylum Mollusca, illustrate its classification down to classes and explain the structural organization of Pilaglobosa
			• CO5:Explain the salient features of phylum Echinodermata and illustrate its classification down to classes
			• CO6:Understand the salient features and affinities of phylum Hemichordata
			• CO7:Elucidate the characters of coelomate minor phyla Phoronida, Ectoprocta and Echiura
III	ZOL3B03T	Animal Diversity: Chordata Part – I	• CO1: Explain the characteristics of chordates and outline classification of the phylum Chordata
			• CO2:Describe the salient features and affinities of subphylum Urochordata and its classification down to classes; elucidate the morphology and structural organization of Ascidia
			• CO3:Explain the salient features and affinities of subphylum Cephalochordata with reference to Branchiostoma

			• CO4:Describe the salient features of subphylum Vertebrata, illustrate its classification down to classes and elucidate the characteristics of division Agnatha
			• CO5:Enumerate the salient features of superclass Pisces and illustrate its classification down to orders and the morphology and structural organization of Mugilcephalus
			• CO6:Describe the salient features and affinities of class Amphibia and its classification up to orders; explain the morphology and organ systems of Hoplobatrachustigerinus
			• CO7:Elucidate the characteristic features of the class Reptilia and its classification down to orders; describe the morphology and organ systems of Calotesversicolor
IV	ZOL4B04T	Animal Diversity: Chordata Part-II	• CO1: Describe the classification of class Aves down to orders, salient features of each order with suitable examples
			• CO2:Describe the external characters and functional systems of Columba livia
			• CO3:Enumerate the salient features and classification of class Mammalia down to orders with suitable examples
			• CO4:Elucidate the external characters and functional systems of Oryctolaguscuniculus
			• CO5:Compare the circulatory, excretory and systems of vertebrates
IV	ZOL4B05P	Zoology [Core Course] Practical – I: Animal Diversity	• CO1: Identify and describe specified protists and acoelomate & pseudocoelomate nonchordates and perform the culture of selected protists; understand the histological features of coelenterate, platyhelminth and nematode
			• CO2:Identify and describe specified coelomate non-chordates and the transverse sections of annelids; Perform mounting of the specified organs of selected nonchordates.
			• CO3Identify and describe specified chordates and specified bones of chordates; Prepare key for identification of venomous snakes; Perform mounting and dissection of specified organ systems of chordates.
			• CO4:Identify and describe selected vertebrates and specified bones of vertebrates.

V	ZOL5B06T	Cell Biology And Genetics	• CO1:Understand the principles and applications of various types of light microscopes, electron, Scanning-tunnelling and Atomic force microscope and illustrate the histological and histochemical processing of tissues
			• CO2:Explain the basic structure of a eukaryotic cell and the structure and functions of plasma membrane, mitochondria, lysosome, cytoskeletal elements and interphase nucleus
			• CO3:Illustrate the nucleosome organization of chromatin and higher order structures; structure of chromosomes and giant chromosomes
			• CO4:Enumerate eukaryotic cell cycle and cell division by amitosis, mitosis and meiosis
			• CO5:Explain the causes of transformation, characteristics of transformed cells and the role of protooncogenes and tumor suppressor genes in malignant transformation; mechanism and significance of apoptosis
			• CO6: Enumerate allelic and non-allelic gene interactions; supplementary, complementary, polymeric, duplicate and modifying genes and polygenic inheritance
			• CO7:Illustrate multiple allelism and solve problems related to blood group inheritance
			• CO8:Explain characteristics of linkage groups and linkage map; crossing over and calculation of recombination frequency; sex-linked, sex-influenced and sex-limited characters; sex differentiation and disorders of sexual development
			• CO9:Describe the mechanisms of sex determination including chromosomal, genic, haploid-diploid mechanisms; the hormonal and environmental influence on sex determination and gynandromorphism
			• CO10:Explain mutagenesis, mutagens and chromosomal and gene mutations
			• CO11:Enumerate the classification and grouping of human chromosomes; numerical and mutational human autosomal and sex chromosomal anomalies; polygenic human traits and genetic counseling

V	ZOL5B07T	Biotechnology, Microbiology And Immunology	• CO1:Illustrate the steps in genetic engineering and animal cell culture
			• CO2:Explain transfection methods, transgenic animals and ethical issues of transgenic animals
			• CO3:Enumerate the applications of biotechnology
			• CO4:Understand the biological diversity of microbial forms and the various techniques for handling microbes in the laboratory
			• CO5:Enumerate the basic structure and life cycle of bacteria and virus
			• CO6: Understand the industrial and medical importance of microorganisms
			• CO7:Describe different types of immunity and the cells and organs of the immune system
			• CO8:Explain antigen, antibody, immunity and major histocompatibility complex
			• CO9:Enumerate autoimmune and immunodeficiency diseases and immunology of tumor and organ transplantation
V	ZOL5B08T	Biochemistry And Molecular Biology	• CO1:Understand the elements of biological importance and the non-covalent interactions that stabilize biomolecules
			• CO2:Describe the classification, types, structure, reactions and biological roles of carbohydrates, and diabetes Type I and II
			• CO3:Enumerate the properties and classification of amino acids and their standard abbreviations; hierarchial levels of protein structure, classification, separation, purification and sequencing of proteins
			• CO4:Explain the classification and functions of lipids and fatty acids; chemistry and structure of nucleic acids and sequencing of DNA
			• CO5:Understand the classification, nomenclature and properties of enzymes; enzyme action, co-enzymes, cofactors, isozymes, ribozymes and allosteric enzymes
			• CO6: Explain glycolysis, Kreb's cycle, glycogenesis, glycogenolysis, gluconeogenesis, HMP pathway; amino acid and fatty acid oxidation and oxidative phosphorylation

			• CO7:Describe the mechanism of DNA duplication and the role of enzymes
			• CO8:Understand the concept of gene and gene expression; genetic code and wobble Hypothesis
			• CO9:Explain the mechanism of transcription and post-transcriptional modification of hnRNA
			• CO10:Enumerate the processes of translation and post-translational modification and targeting of peptides
			• CO11:Describe the regulation of trp operon, C-value, repetitive DNA, satellite DNA, selfish DNA, overlapping genes, pseudogenes, cryptic genes, transposons and retrotransposons
			• CO12:Explain the structure and life cycle of bacteriophages and the gene transfer mechanisms in bacteria
V	ZOL5B09T	Methodology In Science, Biostatistics And Bioinformatics	• CO1:Explain science, its importance, disciplines and the major steps in formulating a hypothesis, various hypothesis models, theory, law and importance of animal models, simulations and virtual testing
			• CO2:Illustrate the principles and procedures in designing experiments and elaborate the requirements for carrying out experiments
			• CO3:Describe the ethical concerns in practicing science
			• CO4:Understand the Scope and role of statistics; methods and procedures of sampling; Construction of tables, charts and graphs
			• CO5:Calculate central tendency and measures of dispersion and application of its knowledge on hypothesis testing as well as in problem solving
			• CO6: Enumerate major biological databases and database search engines
			• CO7:Perform DNA and protein sequence analysis, including sequence alignment and sequence similarity search using BLAST, FASTA, CLUSTAL W and CLUSTAL X
			• CO8:Understand molecular phylogenetics and tools and methods for construction of phylogenetic trees

			• CO9:Explain genome sequencing technologies, functional genomics, proteomic technologies and molecular docking and drug design
V	ZOL6B15P	Zoology [Core Course] Practical – II	• CO1:Perform experiments in cell biology and genetics including demonstration of Barr body in buccal epithelial cells of man, polytene chromosome in the salivary glands of D. Melanogaster larva, mitotic division in onion root tip cells, micrometry of microscopic objects, prepare whole mounts of microscopic objects, and calculatemitotic and metaphase index from slides
			• CO2:Enumerate the inheritance of major human genetic traits, pedigree chart, normal and abnormal human karyotypes, phenotypic differences of male and female drosophila and solve problems on Monohybrid, dihybrid crosses, blood groups and sex-linked inheritance.
			• CO3:Understand electrophoresis, PCR, Northern blotting, Southern blotting and Western blotting, DNA sequencing and fingerprinting and isolation of genomic DNA.
			• CO4:Perform gram staining and preparation of culture media for bacteria and demonstrate bacterial motility by standard laboratory protocols
			• CO5:Understand the detection of human blood groups and organs of immune system
			• CO6: Perform standard biochemical tests for the detection of reducing and nonreducing sugars, polysaccharides, proteins and lipids.
			• CO7:Understand the staining of mitochondria, tissue homogenization and isolation of nuclei, effect of colchicines of cell division, extraction of DNA and polyacrylamide and agarose gel electrophoresis
			• CO8:Solve basic problems in biostatistics and Bioinformatics
V	ZOL5D01T	Zoology Open Course- I (Theory) Reproductive Health And Sex Education	• CO1:Understand the reproductive health, and importance of sex education for teen and youth
			• CO2:Explain the chromosomal mechanism of sex determination and sex chromosomal anomalies

			• CO3:Describe the structural and functional features of human reproductive system, fertilization, implantation, pregnancy, gestation, placenta, parturition and lactation
			• CO4:Explain the scope of reproductive technologies in infertility management and the assisted reproductive techniques
			• CO5:Understand the different methods of prenatal diagnosis and associated ethical issues
			• CO6: Describe the different methods of fertility control.
			• CO7:Understand the symptoms, mode of transmission, diagnosis and treatment ofdifferent sexually transmitted diseases and their socio economic dimensions
			• CO8:Describe sexual orientation, sexual abuse and myths
			• CO9:Understand the ethical aspects of sex
VI	ZOL6B10T	Physiology And Endocrinology	• CO1: Describe the regulation of digestion in man, nutrition in pregnancy and infancy, nutritional disorders, balanced diet, starvation, fasting and obesity.
			• CO2: Understand the mechanism of transport and exchange of respiratory gases and its neurophysiological control and physiological problems in diving mammals, new-born and aged individuals.
			• CO3:Describe functions, composition, coagulation, transfusion, agglutination and clinical analysis of blood, haemoglobinopathies, types of heart and common cardio-vascular problems
			• CO4:Understand the osmoregulatory mechanisms in animals; excretion and its hormonal control and common renal disorders in man.
			• CO5: Explain the ultrastructure of skeletal muscles and biochemical events and energetics of muscle contraction.
			• CO6 :Understand the different types of nerve cells, glial cells and nerve fibres, and the mechanism of nerve impulse transmission
			• CO7: Understand the types, physiology and significance of bioluminescence, and the structure and functions of electric organs.

			• CO8: Describe invertebrate neuro-endocrine organs and hormones, vertebrate endocrine glands, their hormones and functions
			• CO9:Understand the concept of neurosecretion and the mode of action of peptide and steroid hormones.
VI	ZOL6B11T	Reproductive And Developmental Biology	• CO1: Explain the reproductive strategies in invertebrates and vertebrates and structural and functional features of human reproductive system
			• CO2: Describe process of fertilization, pregnancy, gestation, placentation, parturition and lactation in humans.
			• CO3: Explain the scope of reproductive technologies in infertility management; prenatal diagnostic techniques and methods of fertility control
			• CO4:Understand the phases and theories of development, and classification of eggs
			• CO5: Enumerate the types of cleavage, arrangement of blastomeres, germ layers and their derivatives, cell lineage in Planocera and different types of blastula.
			• CO6: Illustrate the early developmental process of egg in Amphioxus,frog, chick and man
			• CO7: Explain the basics of cell differentiation and its genetic control, stem cells and applications of stem cell technology
			• CO8: Describe parthenogenesis, types, and significance
			• CO9:Explain fate map construction, Spemann's constriction experiments on amphibian embryos, organizers in development, embryonic induction, gradient experiments in sea urchin eggs, cloning experiments in sheep and teratogenesis.
VI	ZOL6B12T	Environmental And Conservation Biology	• CO1: Explain the structure of ecosystem and its functioning through energy flow and nutrient cycling.
			• CO2:Enumerate biogeochemical cycles and understand the concept of limiting factors
			• CO3:Describe the ecology of population, community and habitat as a self regulating system
			• CO4:Understand various types of population interactions and appraise the co-evolution

			• CO5:Comprehend the diverse environmental and sustainability challenges ranging from local to global and the establishment of perfect harmony between economic development, social issues and environmental conservation
			• CO6: Enumerate the several tools and techniques employed for studies on populations, communities and ecosystems.
			• CO7:Understand the threats to biodiversity, and strategies adapted for the conservation of diversity of organisms
			• CO8: Describe the various international strategies for conserving biodiversity
			• CO9 :Describe the toxic chemicals, their toxicity levels and the health hazards caused by them
VI	ZOL6B13T	Ethology, Evolution And Zoogeography	• CO1:Describe the patterns and mechanisms of animal behavior
			• CO2: Illustrate biological rhythms and the chemical basis of communication
			• CO3:Identify major evolutionary transitions over time, and explain the tools and evidences that support current hypotheses of the history of life on earth
			• CO4:Describe the evidences for evolution and its required corollaries
			• CO5:Explain the various theories of evolution
			• CO6:Describe the mechanisms by which evolution occurs
			• CO7:Recognize the significance of reproductive isolation in reducing gene flow between populations, biological and morphological species concepts and distinguish between prezygotic and postzygotic barriers to reproduction
			• CO8:Review the events in human evolution
			• CO9:Explain ecological and historical foundations for understanding the distribution and abundance of species, and their changes over time and comprehend the basic principles of biogeography as a discipline
VI	ZOL6B14 (E)02T	Aquaculture, Animal Husbandry And Poultry Science	• CO1:Explain aquaculture and the process of prawn, mussel and pearl culture
			• CO2:Illustrate the methodology of pisciculture and understand common culture fishes and ornamental fishes

			• CO3:Identify major fishing crafts and gear and enumerate fish utilization and Preservation
			• CO4: Enumerate the poultry rearing techniques and understand major breeds of fowl
			• CO5 :Understand the major breeds of cattle, cattle feeds and diseases of cattle
			• CO6:Illustrate the steps in dairy processing and identify the role of dairy development in rural economy
VI	ZOL6B16P	Zoology [Core Course] Practical – III	• CO1:Perform standard laboratory experiments for the estimation of Hb, presence of hCG/abnormal constituents in urine, detection of blood pressure, bleeding and clotting time and identification of formed elements in blood
			• CO2:Identify selected stages in the development of frog and chick and chosen larval forms of invertebrates and vertebrates
			• CO3: Carry out experiments of laboratory standards to estimate water quality parameters including, dissolved Oxygen, Carbon dioxide, hardness and pH; determination of adulteration of selected food items and identify marine planktons and soil organisms
			• CO4:Demonstrate the behavioural response of earthworm/dipteran larva to selected stimuli
			• CO5:Describe homologous , analogous and vestigial organs, connecting links, adaptive radiation and evolution of man
			• CO6:Illustrate zoogeographical realms, Wallace line, Weber line, Wallacea and the distribution of Peripatus, lung fishes, Sphenodon, monotremes and marsupials
			• CO7:Identify the normal and selected abnormal human karyotypes and inheritance of chosen traits from pedigree charts/describe ornamental and other culture fishes/ describe chosen beneficial and harmful insects
COMPLEMENTARY COURSE			
I	ZOL1C01T	Animal Diversity And Wildlife Conservation	• CO1:Describe the general characters of protists and salient features of phylum– Rhizopoda,Ciliophora, Dinoflagellata and Apicomplexa
			• CO2:Enumerate the salient features and examples of Phylum – Porifera, Coelenterata,Platyhelminthes,Aschelminthes,Annelida,Arthropoda, Onychophora, Mollusca and Echinodermata, and the structural

			organization of Peneaus sp.
			• CO3:Describe the characteristic features and classification of phylum Chordata with examples and, structural organization of Oryctolaguscuniculus
			• CO4:Explain levels of biodiversity, threats to biodiversity, biodiversity hotspots, importance and strategies for conservation of wildlife and sustainable development
II	ZOL2C02T	Economic Zoology	• CO1:Explain parasitism and the major protist, cestode, trematode and nematode parasites of man and major insect vectors of human diseases and their control
			• CO2:Understand major beneficial and harmful insects, damages caused to host plants and their control measures
			• CO3:Understand pisciculture, prawn, mussel and pearl culture
III	ZOL3C03T	Physiology And Ethology	• CO1:Describe the structure of plasma membrane and the various trans-membrane transport mechanisms
			• CO2:Enumerate the constituents of normal diet and the mechanism of digestion and absorption of carbohydrates, proteins and lipids and the regulation of gastrointestinal function
			• CO3:Explain the mechanism of transport of respiratory gases, control of respiration, respiratory problems and artificial ventilation
			• CO4:Explain the structure and working of human heart and mechanism of regulation of heart beat; constituents of human blood and blood transfusion and cardiovascular problems
			• CO5:Illustrate the structure of human kidney, the mechanism of urine formation, hormonal control of kidney function and kidney disorders; osmoregulation and urea cycle
			• CO6:Enumerate the structure of myofibrils and myofilaments; muscle contractile and regulatory proteins and mechanism of muscle contraction
			• CO7 Explain different types of nerve cells and glial cells, maintenance of resting membrane potential, generation and propagation of action potential and synaptic transmission
			• CO8:Describe innate behavior, learned behavior, patterns of behavior and factors that affect behavior

			• CO9:Enumerate biological rhythms, communication in animals and social organization in mammals
IV	ZOL4C04T	Genetics And Immunology	• CO1:Describe human karyotype , chromosomal anomalies and polygenic inheritance
			• CO2 Explain the mechanisms of sex determination
			• CO3:Enumerate the concept of genes, gene expression, genetic code, transcription and translation
			• CO4:Illustrate the mechanism of recombinant DNA technology and its practical applications
			• CO5:Explain the types of cancer, causes of transformation and characteristics of transformed cells
			• CO6:Identify the cells and organs of immune system, antigens and antibodies
			• CO7:Enumerate antigen-antibody interaction, generation of B-cell and T-cell response and major immune techniques
			• CO8:Explain primary and secondary immunodeficiency diseases, autoimmune diseases, vaccination and vaccines
IV	ZOL4C05P	Complementary Course Practical	• CO1:Identify the salient features of the phylum; taxonomic position, habit, habitat, adaptations/importance of selected protists, non-chordates and chordates
			• CO2:Describe major human parasites and economically important insects, mollusks and fishes
			• CO3:Perform detection of human blood groups and prepare human blood smear as per laboratory standards; mounting of specialized organs of selected nonchordates and chordates, and demonstrate the presence of biomolecules in samples by standard laboratory protocols
			• CO4:Illustrate the normal and selected abnormal human karyotypes and mode of inheritance of selected human genetic disorders and perform the dissection of earthworm and sardine to demonstrate the alimentary canal and Penaeus to demonstrate the nervous system

DEPARTMENT OF COMPUTER SCIENCE

Programme Specific Outcomes (PSOs) – B.C.A. Programme

	Programme specific outcomes
PSO1	To prepare the young minds to work in a potentially rich and employable field of computer applications.
PSO2	To be a foundation graduate Programme this will act as a feeder course for higher studies in the area of Computer Science/Applications.
PSO3	To develop skills in software development so as to enable the BCA graduates to take up self-employment in Indian and global software market.
PSO4	To train and equip the students to meet the requirements of the Software industry in the country and outside

Course Outcomes

Semester	Course Code	Course Name	Course outcomes
Common Courses (Code A)			
III	A11	Python Programming	• CO1:Understand various statements, data types and functions in Python
			• CO2: Develop programs in Python programming language
			• CO3:Understand the basics of Object oriented programming using Python
	A12	Data Communication and Optical Fibers	• CO1:Understand Data Communication , Networks and Protocols
			• CO2:Understand Optical Fiber Communication
IV	A13	Microprocessors Architecture and Programming	• CO1: To understand internals of Microprocessor.
			• CO2: To learn architecture of 8085 Microprocessor
			• CO3: To learn instruction set of 8085 Microprocessor
			• CO4: To learn how to program a Microprocessor
	A14	Sensors and Transducers	• CO1: Explain resistance, inductance and capacitance transducers.
			• CO2: Perceive the concepts of temperature and pressure transducers.
			• CO3: Perceive the concepts level transducers such as and flow transducers
			• CO4:Explain Electromagnetic

			transducers and radiation sensors
			• CO5: Explain force and torque transducers and sound transducers
Core courses (Code B)			
I	BCA1B01	Computer Fundamentals & HTML	• CO1:To equip the students with fundamentals of Computer
			• CO2:To learn the basics of Computer organization
			• CO3:To equip the students to write algorithm and draw flow chart for solving simple problems
			• CO4:To learn the basics of Internet and webpage design
II	BCA2B02	Problem Solving Using C	• CO1:To equip the students with fundamental principles of Problem-Solving aspects.
			• CO2:To learn the concept of programming
			• CO3: To study C language
			• CO4: To equip the students to write programs for solving simple computing problems
	BCA2B03	Programming Laboratory I: HTML and Programming in C	• CO1:To make the students learn web designing.
			• CO2: To make the students learn programming environments.
			• CO3:To practice procedural programming concepts.
			• CO4:To make the students equipped to solve mathematical or scientific problems using C
III	BCA3B04	Data Structures Using C	• CO1:To introduce the concept of data structures
			• CO2: To make the students aware of various data structures
			• CO3:To equip the students implement fundamental data structures
IV	BCA4B05	Database Management System and RDBMS	• CO1: To learn the basic principles of database and database design
			• CO2: To learn the basics of RDBMS
			• CO3:To learn the concepts of database manipulation SQL
			• CO4: To study PL/SQL language

	BCA4B06	Programming Laboratory II: Data Structures and RDBMS	• CO1:To make the students equipped to solve mathematical or scientific problems using C
			• CO2:To learn how to implement various data structures.
			• CO3:To provide opportunity to students to use data structures to solve real life problems.
V	BCA5B07	Computer Organization and Architecture	• CO1:To learn logic gates, combinational circuits and sequential circuits
			• CO2:To learn basics of computer organization and architecture
	BCA5B08	Java Programming	• CO1: To review on concept of OOP.
			• CO2:To learn Java Programming Environments.
			• CO3:To practice programming in Java.
			• CO4:To learn GUI Application development in JAVA.
	BCA5B09	Web Programming using PHP	• CO1:To review on concept of Web Programming.
			• CO2: To learn Client side programming.
			• CO3:To practice programming in PHP
			• CO4: To learn PHP & PostgreSQL.
	BCA5B10	Principles of Software Engineering	• CO1:To learn engineering practices in Software Development.
			• CO2:To learn various software development methodologies and practices.
			• CO3:To learn and study various Evaluation methods in Software Development.
VI	BCA6B11	Android Programming	• CO1: To have a review on concept of Android programming.
			• CO2:To learn Android Programming Environments.
			• CO3:To practice programming in Android.
			• CO4:To learn GUI Application development in Android platform with XML
	BCA6B12	Operating Systems	• CO1:To learn objectives & functions of Operating Systems.
			• CO2: To understand processes and its life cycle.

			• CO3: To learn and understand various Memory and Scheduling Algorithms
			• CO4: To have an overall idea about the latest developments in Operating Systems
	BCA6B13	Computer Networks	• CO1:To learn about transmissions in Computer Networks.
			• CO2:To learn various Protocols used in Communication.
			• CO3: To have a general idea on Network Administration.
	BCA6B14	Programming Laboratory III: Java and PHP Programming	• CO1:To practice Java programming.
			• CO2: To practice client side and Server Side Scripting.
			• CO3: To practice PHP Programming
			• CO4:To practice developing dynamic websites.
			• CO5: To practice how to interact with databases through PHP.
	BCA6B15	Programming Laboratory IV: Android and Linux shell Programming	• CO1:To practice Android programming.
			• CO2:To practice user interface applications.
			• CO3:To develop mobile application.
			• CO4:To practice shell programming.
	BCA6B16	Software testing & Quality Assurance	• CO1:To get a general introduction and basic skills on software testing and quality assurance techniques and tools
	BCA6B17	Industrial Visit and Project Work	• CO1:To provide practical knowledge on software development process
Complementary courses (Code C)			
I	BCA1C01	Mathematical Foundations for Computer Applications	• CO1: To learn the basic principles of linear algebra and vectors.
			• CO2: To learn the basic principles of differential and integral Calculus
			• CO3:To learn the mathematical modeling using ordinary and partial equations
	BCA1C02	Discrete Mathematics	• CO1: To learn the mathematical logic & Boolean Algebra
II	BCA2C03	Financial & Management Accounting	• CO1: To get a general introduction on accounting and its general application.
			• CO2: To get a general understanding on various tools for financial statement analysis.

			• CO3: To get a general understanding on accounting procedures up to the preparation of various financial statements.
			• CO4: To get a general understanding of the important tools for managerial decision making.
	BCA2C04	Operations Research	• CO1: To get a general introduction in solving linear programming problems.
			• CO2: To get a general understanding of network analysis technique.
			• CO3: To get a general understanding of different mathematical models.
III	BCA3C05	Computer Oriented Numerical and Statistical Methods	• CO1: To learn the floating point arithmetic
			• CO2: To learn how to solve linear equations
			• CO3: To learn the numerical differentiation and integration
			• CO4: To learn basics of statistics, probability theory
	BCA3C06	Theory of Computation	• CO1: To get a general introduction to Theory of computer science
			• CO2: To get a general understanding on different languages, grammar, automata
IV	BCA4C07	E-Commerce	• CO1: To get a general introduction Electronic Commerce framework.
			• CO2: To a general understand on various electronic payment systems.
			• CO3: To get a general understanding on internal information systems.
			• CO4: To get a general understanding on the new age of Information.
	BCA4C08	Computer Graphics	• CO1: To learn basics of Computer Graphics
Open Course (Code D)			
V	BCS5D01	Introduction to Computers & Office Automation	• CO1: To get a general introduction to office automation packages.
			• CO2: To learn Office Automation.
COMPUTER SCIENCE - COMPLEMENTARY			
I	CSC1C01	Computer Fundamentals	• CO1:To learn the basics of computer hardware units and how they work together
			• CO2:To acquire basic skill with office packages

II	CSC2C02	Fundamentals of System Software,Networks and DBMS	• CO1:To learn the basic concepts of various system software
			• CO2:To learn the basics of Computer Networks
			• CO3:To learn the basics of Databases
III	CSC3C03	Problem Solving Using C	• CO1:To learn the concepts of programming.
			• CO2: To learn the C language
IV	CSC4C04	Data Structure Using C	• CO1:To introduce the concept of datastructures
			• CO2: To make the students aware of various datastructures
			• CO3:To equip the students implement fundamental datastructures
	CSC4C05	Programming Lab: C and Data structure	• CO1:To develop C Programming skills
			• CO2:To make the students equipped to solve mathematical or scientific problems using C
			• CO3:To learn how to implement various data structures.

DEPARTMENT OF BUSINESS ADMINISTRATION

Programme Specific Outcomes (PSOs) – Bachelor of Business Administration

	Programme specific outcomes
PSO1	Critical Thinking Skills: Students are able to define, analyze, and devise solutions for structured and unstructured business problems and issues using cohesive and logical reasoning patterns for evaluating information, materials, and data.
PSO2	Communication Skills: Students are able to conceptualize a complex issue into a coherent written statement and oral presentation.
PSO3	Technology Skills: Students are competent in the uses of technology in modern organizational operations.
PSO4	Entrepreneurship and Innovation: Students can demonstrate the fundamentals of creating and managing innovation, new business development, and high-growth potential entities.
PSO5	Business Knowledge: Students can demonstrate technical competence in domestic and global business through the study of major disciplines within the fields of business.

Course Outcomes

New syllabus (2019 onwards)

Semester	Course Code	Course Name	Course outcomes
I	BBA1B01	Management theory and practices	• CO1:Discuss different schools of management thought
			• CO2:Understand apply the concepts of planning, organizing, staffing and controlling for effective • management
			• CO3:Aware and apply the ethically and socially responsible behaviour in Management
			• CO4:Aware and pursue the modern management practices in business
I	BBA1C01	Managerial Economics	• CO1:Acquire knowledge regarding relevant economic concepts applicable in managerial decisions
			• CO2:Design competition strategies, including costing, pricing, product differentiation and market environment according to the natures of products and the structures of the markets

			• CO3:Make optimal business decisions by integrating the concepts of economics
II	BBA2B02	Financial accounting	• CO1: Discuss and apply fundamental accounting concepts, principles and conventions
			• CO2:Record basic accounting transactions and prepare annual financial statements for a sole • proprietorship business
			• CO3:Record accounting transactions in respect of hire purchase and instalment system and branches
II	BBA2B03	Marketing management	• CO1: Understand and develop insights and knowledge base of various concepts that driving marketing strategies.
			• CO2:Develop skills in organizing for effective marketing and in implementing the market planning process
			• CO3:Evaluate the significance of marketing
			• CO4:Analyze the relationships between marketing management and the political, economic, legal and social policies and its impact on business.
			• CO5:Identify the role and significance of various elements of marketing mix.
			• CO6:To evaluate the role and relevance of marketing organization in current marketing conditions
			• CO6:Understanding the marketing concepts in global environment. and its relevance.
III	BBA3A11	Basic Numerical methods	• CO1:Acquire knowledge of numerical equations, matrices progressions, financial mathematics and descriptive statistics.
			• CO2:Do calculation of arithmetic mean, median and mode and partition values.

			• CO3:Understand correlation regression analysis and their applications.
			• CO4:Understand statistical testing and their applications.
III	BBA3A12	Professional business skills	• CO1:To update and expand basic Informatics skills of the students.
			• CO2:To equip the students to effectively utilize the digital knowledge resources for their study.
			• CO3: to understand the basics of Business Data Analysis
			• CO4:update about Socio_Cyber Informatics
III	BBA3B04	Corporate accounting	• CO1:The course acquaints the students with the knowledge about corporate accounting. The modules introduce the fundamental Indian accounting standard and equip the students with skills for preparing corporate accounts.
			• CO2:Understand and apply fundamental IndASs on inventories, PPE, provisions, income tax, borrowing cost and intangible assets
			• CO3:Prepare annual financial statements for companies and compute accounting ratios.
			• CO4:Record accounting transactions in respect of redemption of preference shares and debentures
III	BBA3B05	Financial management	• CO1:This course aims to enable students to understand the basic concepts of financial Management and make them aware of major decisional areas of financial management.
			• CO2:Understand and develop insights and knowledge base of various concepts of finance
			• CO3:Develop skills for effective Financial, Investment and Dividend decisions making

III	BBA3C02	Business regulations	• CO1:This course aims to familiarise the students with major statutes affecting the operations of business organizations.
			• CO2:Interpret statutory provisions related to business laws
			• CO3:Analyse legal issues arising in day-to-day business operations prevalent in India
			• CO4:Evaluate the core concepts in the legal structure of business organisations
			• CO5:Discuss possible solutions to issues in organisations in the frame work of business laws
IV	BBA4A13	Entrepreneurship Development	• C01:To familiarize the students with the concept of entrepreneurship.
			• CO2:To identify and develop the entrepreneurial talents of the students.
			• CO3:To generate innovative business ideas in the emerging industrial scenario.
			• CO4:Become aware of entrepreneurship opportunities available in the society for the entrepreneur.
			• CO5:Acquaint them with the challenges faced by the entrepreneur.
			• CO6:Develop the motivation to enhance entrepreneurial competency.
IV	BBA4A14	Banking and insurance	• CO1:To enable the students to acquire knowledge about basics of Banking and Insurance.
			• CO2:To familiarize the students with the modern trends in banking.
			• CO3:Have an exposure of the techniques & application of contemporary banking.
			• CO4:Understand the Structure of Indian Banking System.
			• CO5:Gain specialist legal knowledge and an understanding of

			the theoretical underpinnings of Insurance Law within a practical context, whilst developing expertise in these areas
			• CO6:Create valuable insights into the key principles and practices that regulate the insurance industry.
			• CO7:Provide knowledge about approaches to risk management and other essential issues.
IV	BBA4B06	Cost and Management accounting	• CO1:The objective of the course is to acquaint the students with the basic Concepts and tools of cost and Management Accounting
			• CO2:Understand cost and management accounting concepts and its application for decision making.
			• CO3:Aware as to cost consciousness and the various methods and techniques of costing
			• CO4:Analyse implications of cost in managerial decisions.
			• CO5:Prepare different budgets.
			• CO6:Understand Break Even concept.
			• CO7:Understand Standard costing and analysis of deviation.
IV	BBA4C04	Corporate regulations	• C01:To familiarise the students with corporate law and to make them aware of the applications of • importance of company law in the management of organisations.
			• C02:Understand the features and different types of companies
			• C03:Aware as to the formation of companies and also as to different documents of companies
			• C04:Understand the share capital and other relevant provisions of the same
			• C05:Understand the management, corporate governance, corporate social responsibility and some basic aspects of SEBI,

			• C06:Understand the provisions of conducting meetings and also the winding up procedure of companies.
IV	BBA4C05	Quantitative Techniques for Business	• C01: To familiarise student with the use quantitative techniques in managerial decision making.
			• C02:Understand and develop insights and knowledge base of various concepts of Quantitative Techniques.
			• C03:Develop skills for effectively analyse and apply Quantitative Techniques in decision making.
V	BBA5B07	Human resources management	• CO1:To give a conceptual understanding of human resource practices in organizations.
			• CO2:Understand and develop insights and knowledge base of various concepts and Functions of Human Resource Management
			• CO3: Learn the latest trends in Human Resource Management
V	BBA5B08	Business research methods	• CO1:To provide an insight into the fundamentals of business research and to acquire practical knowledge and required skills in carrying out research which they are expected to possess when they enter the industry as practitioners
			• CO2;Understand and develop insights and knowledge base of various concepts in Research.
			• CO3:Develop skills for conducting business research
			• CO3:Judge the reliability and validity of experiments and perform exploratory data analysis.
			• CO4:Use parametric and non-parametric hypothesis tests (and interpreting their results).
			• CO5:Use computer-intensive methods for data analysis.
V	BBA5B09	Operations Management	• CO1:To familiarize the students with the concepts, tools and practices of operations management

			and to learn about the decisions and processes of operations management in a business firm.
			• CO2:Understand the different concepts of operation Management.
			• CO3:Acquire the knowledge to make plans at the operational level of an industry
			• CO4:Understand ever growing importance of Production and Operations management in uncertain business environment.
			• CO5:Gain an in-depth understanding resource utilization of an organization.
			• CO6:Appreciate the unique challenges faced by firms in services and manufacturing.
			• CO7:Develop skills to operate competitively in the current business scenario.
V	BBA5B10	Income tax	• CO1:To impart basic knowledge and equip students with application of principles and provisions of Income Tax Act, 1961 amended up-to-date.
			• CO2:On completing the course the students will be able to understand the latest provisions of Income Tax Act Law and as well as and
			• C03: enable to compute different heads of income
			• CO4:enable to compute Total income
			• CO5: enable to compute tax liability.
V	BBA5B11	Financial market and institutions	• CO1:To provide basic knowledge about the structure, organisation and working of financial system in India.
			• CO2:The course helps to understand different aspects and components of financial Institutions and financial markets.

			• CO3:This will enable the students to take rational decisions on financial market and institutions.
			• CO4:Identify roles of financial intermediaries within financial markets.
V	BBA5D01	E-Commerce	• CO1:To understand the importance of database systems for business management
			• CO2:To gain a practical orientation to database development and maintenance.
			• CO3:On completing the course the students will be able to Understand the practice of E-commerce, e-payment and also the security issues.
VI	BBA6B12	Organizational Behaviour	• CO1:To familiarize the students with the basic concepts of individual behaviour and organizational behaviour
			• CO2:To enable the students to catch an idea about inter-personal and group behaviour
			• CO3:To acquire knowledge regarding the organizational change and organizational development
			• CO4:Understand the different concepts of Organisational Behaviour
			• CO5:Analyse individual and group behaviour
			• CO6:Understand and deal with organisational change, development and stress
VI	BBA6B13	Management science	• CO1:To provide a basic knowledge about operations research and to acquaint the students some common operations research tools for various business decision marketing situations.
			• CO2:On completion of the course the students will be able to learn different OR techniques useful in managerial decisions.

VI	BBA6B14	Project management	• CO1:To enable the students to acquire basic knowledge of different facets of Project Management.
			• CO2:Understand the different concepts of managing a project
			• CO3:Analyse the viability of a project.
			• CO4:Identify and assess risks (including OHS) as well as the economic, social and environmental impacts of engineering activities.
			• CO5:Communicate in a various ways to collaborate with other people, including accurate listening, reading and comprehension, based on dialogue when appropriate, taking into account the knowledge, expectations, requirements and terminology.
VI	BBA6B15	Financial services	• CO1:the students with an understanding of the various financial services and investment opportunities available in the country
			• CO2:On completion of the course students will be able to aware of various financial services available in Indian financial system
			• CO3:Describe operational, business, financial and traditional risk.
			• CO4:Distinguish among various financial intermediaries and markets.
VI	BBA6B16	Investment management	• CO1: To familiarise the students with the world of investments and to provide a theoretical framework for the analysis and valuation of investments.
			• CO2: By completing the course students will be able to aware of various investment opportunities from an investor's perspective of maximizing return on investment.

			• CO3: Develop the relationship between interests and prices of bonds.
			• CO4: Understand the nature of share prices movements.
			• CO5: Interpret the evidence relating to market efficiency.
VI	BBA6B17 (PR)	Project and viva voce	• CO1: Develop a thorough understanding of the chosen subject area.
			• CO2: Demonstrate the ability to collate and critically assess/interpret data
			• CO3: Develop an ability to effectively communicate knowledge in a scientific manner.
			• CO4:Provide recommendations based on research findings.

DEPARTMENT OF COMMERCE

Programme Specific Outcomes (PSOs):- B. Com Computer Application

	Programme Specific Outcomes
PSO1	To make the students efficient in office automation with computers and computer software applications
PSO2	To facilitate the students to join professional courses
PSO3	To develop subject skill within various discipline of commerce, business, accounting , economics, finance , auditing and marketing with soft skills in Tally and ERP, E-commerce
PSO4	Helps to acquire entrepreneurship

Course Specific Outcomes (CSOs)

SEM	Course code	Course Name	Course specific outcomes
1	BCM1B01	BUSINESS MANAGEMENT	• C01: This course introduces the importance of ethics in business. • CO2: Helps to understand the process of business management and its functions and acquire the knowledge and capability to develop ethical practices for effective management.
1	BCM1C01	MANAGERIAL ECONOMICS	• C01: Acquaint students with the basic principles of micro and macro economics for developing the understanding of theory of the firm, markets and the environment, which would help them in managerial decision making process.
2	BCM2B02	FINANCIAL ACCOUNTING	• C01: This paper introduces basic accounting concepts, principles and preparation of financial statements • C02: It helps to equip the students with the skills of preparing financial statements for various type of organizations and also enable the student to acquire the knowledge about

			financial reporting standards and to understand corporate accounting method
2	BCM2C02	MARKETING MANAGEMENT	• C01: The course aims to provide basic knowledge about the concepts, principles, tools and techniques of marketing and impart necessary knowledge which helps the students to choose a carrier in the field of marketing. • C02: Exposes the students to the latest trends in marketing.
3	BCM3A11	BASIC NUMERICAL METHODS	• C01: Intends to enable the students to acquire knowledge of numerical equations, matrices progression, financial mathematics and descriptive statistics. • C02: At the end of this course, the students will be able to understand numerical equations, mathematical progressions, financial mathematics, descriptive statistics and their applications.
3	BCM3A12	PROFESSIONAL BUSINESS SKILLS	• C01: Discusses about digital India. • C02: Helps to update and expand basic informatics skills of the students and equip the students to effectively utilize the digital knowledge resources for their study.
3	BCM3B03	BUSINESS REGULATION	• C01: The course tries to familiarize the students with certain statues concerning and affecting business organizations in their operations. • C02: Helps to know the students with the basic concepts, terms and provisions of mercantile and

			business laws and develop the awareness regarding these laws affecting trade, business and commerce.
3	BCM3B04	CORPORATE ACCOUNTING	• C01:To acquire conceptual knowledge of the corporate accounting and the techniques of preparing the financial statements.
3	BCM3C03	HUMAN RESOURCES MANAGEMENT	• C01: The course tries to familiarize the students with the different aspects of managing human resources in an organization and equip the students with basic knowledge and skills required for the acquisition, development and retention of human resources.
4	BCM4A13	ENTREPRENEURSHIP DEVELOPMENT	• C01: The course tries to familiarize the students with the concept of entrepreneurship and generate innovative business ideas in the emerging industrial scenario. • C02: Helps to identify and develop the entrepreneurial talents of students.
4	BCM4A14	BANKING AND INSURANCE	• C01: This course imparts knowledge about different norms of banking services and the procedure for opening and operating bank accounts and various provisions of Banking Regulation Act 1949 and the reforms in the banking sector and insurance sector.
4	BCM4B05	COST ACCOUNTING	• C01: The course tries to familiarize the students with the various concepts and elements of cost and to create cost consciousness among the students.

4	BCM4B06	CORPORATE REGULATIONS	• C01: gives insights on corporate law and to make them aware of the importance of corporate governance in the management of organizations.
4	BCM4C04	QUANTITATIVE TECHNIQUES FOR BUSINESS	• C01: Helps to understand the use of quantitative techniques in managerial decision making.
5	BCM5B07	ACCOUNTING FOR MANAGEMENT	• C01:Provides the students an understanding about the use of accounting and costing data for planning, control, and decision making. • C02:Enables the students to understand the concept and relevance of management accounting.
5	BCM5B08	BUSINESS RESEARCH METHODS	• C01:This course enables the students for acquiring basic knowledge in business research methods and to develop basics kills in them to conduct survey and research case studies.
5	BCM5B09	INCOME TAX LAW AND ACCOUNTS	• C01: Major objective of this course is to impart basic knowledge and equip students with application of principles and provisions income tax Act, 1961 amended up to date.
5	BCM5B10	COMPUTER APPLICATION IN BUSINESS	• C01: This course intends to help the students to acquire basic knowledge about computer and its application in various areas of business • C02: Enable the students to understand the modern trends and technologies in computer.
5	BCM5B11	BUSINESS INFORMATION SYSTEM	• C01:Discusses about the information technology and its relevance to the various areas of business.

5	BCM5D01(OPEN COURSE)	BASIC ACCOUNTING	• C01:Introduces the basic accounting principles and practices.
6	BCM6B12	INCOME TAX AND GST	• C01: Equips students with application of principles and provisions income tax Act, 1961 amended up to date and GST Act 2016.
6	BCM6B13	AUDITING AND CORPORATE GOVERNANCE	• C01:The course introduces the knowledge of auditing principles and techniques • C01:Tries to familiarize the students with the understanding of issues and practices of corporate governance in the global and Indian context.
6	BCM6B14	OFFICE AUTOMATION TOOLS	• C01:This course aims to acquire basic knowledge in the various office automation tools and its application in the various areas of business.
6	BCM6B15	COMPUTERISED ACCOUNTING WITH TALLY	• C01:This course enables the students to acquire basic knowledge in the computerized accounting systems and its applications in the area of business.

DEPARTMENT OF COMMERCE

Programme Specific Outcomes (PSOs):- B.Com FINANCE Programme

	Programme Specific Outcomes
PSO1	To provide students with a wide range of managerial skills and understanding in streams like finance, accounting, taxation and management.
PSO2	Students will learn relevant financial accounting career skills, applying both quantitative and qualitative knowledge to their future careers in business.

Course Specific Outcomes (CSOs)

SEM	**Course code**	**Course Name**	**Course specific outcomes**
1	BCM1B01	BUSINESS MANAGEMENT	• CO1: Understand the process of business management and its functions. • CO2: Acquire knowledge and capability to develop ethical practices for effective management. And also to familiarize the students with current management practices.
1	BCM1C01	MANAGERIAL ECONOMICS	• CO1: Acquaint students with the basic principles of micro and macroeconomics for developing the understanding of theory of the firm, markets and the macro environment, which would help them in managerial decision making processes.
2	BCM2B02	FINANCIAL ACCOUNTING	• CO1: Equip the students with the skills of preparing financial statements for various types of organizations. • CO2: To enable the students to acquire knowledge about financial reporting standards and to understand corporate accounting methods.
2	BCM2C02	MARKETING MANAGEMENT	• CO1: Provide basic knowledge about the concepts, principles, tools and techniques of marketing. • CO2: To impart necessary knowledge which help the student to choose a career in the field of marketing • CO3:To expose the students to the latest trends in marketing

3	BCM3A11	BASIC NUMERICAL METHODS	• CO1:enable the students to acquire knowledge of numerical equations, matrices progressions, financial mathematics and descriptive statistics • CO2: At the end of this course, the students will be able to understand, numerical equations, matrix, progression, financial mathematics, descriptive statistics and their applications
3	BCM3A12	PROFESSIONAL BUSINESS SKILLS	• CO1:Update and expand basic Informatics skills of the students and also to equip the students to effectively utilize the digital knowledge resources for their study
3	BCM3B03	BUSINESS REGULATIONS	• CO1: Familiarize the students with certain statutes concerning and affecting business organizations in their operations.
3	BCM3B04	CORPORATE ACCOUNTING	• CO1:Help the students to acquire conceptual knowledge of the fundamentals of the corporate accounting and the techniques of preparing the financial statements.
3	BCM3C03	HUMAN RESOURCE MANAGEMENT	• CO1:Familiarize the students with the different aspects of managing human resources in an organization and to equip the students with basic knowledge and skills required for the acquisition, development and retention of human resources.
4	BCM4A13	ENTREPRENEURSHIP DEVELOPMENT	• CO1: Familiarize the students with the concept of entrepreneurship, to identify and develop the entrepreneurial talents of the students and also to generate innovative business ideas in the emerging industrial scenario.
4	BCM4A14	BANKING AND INSURANCE	• CO1: Enable the students to acquire knowledge about basics of Banking and Insurance. • CO2: To familiarize the students with the modern trends in banking.
4	BCM4B05	COST ACCOUNTING	• CO1: Familiarize the students with the various concepts and elements of cost and to create cost consciousness among the students.

4	BCM4B06	CORPORATE REGULATIONS	• CO1:Familiarize the students with corporate law • CO2: To make them aware of the importance of corporate governance in the management of organizations.
4	BCM4C04	QUANTITATIVE TECHNIQUES FOR BUSINESS	• CO1: Familiarize student with the use quantitative techniques in managerial decision making.
5	BCM5B07	ACCOUNTING FOR MANAGEMENT	• CO1: Enable the students to understand the concept and relevance of Management Accounting. • CO2:Provide the students an understanding about the use of accounting and costing data for Planning, control, and decision making.
5	BCM5B08	BUSINESS RESEARCH METHODS	• CO1: Enable students for acquiring basic knowledge in business research methods and to develop basic skills in them to conduct survey researches and case studies.
	BCM5B09	INCOME TAX LAW AND ACCOUNTS	• CO1:Impart basic knowledge and equip students with application of principles and Provisions Income - tax Act, 1961 amended up to date.
5	BCM5B10	FINANCIAL MARKETS AND SERVICES	• CO1:Provide basic knowledge about the structure, organization and working of financial System in India.
5	BCM5B11	FINANCIAL MANAGEMENT	• CO1:Familiarize the students with the concepts, tools and Practices of financial management. And to learn about the decisions and processes of financial management in a business Firm.
5	BCM5D01	OPEN COURSE	• CO1:Enable the students to acquire knowledge of Accounting Principles and Practice
6	BCM6B12	INCOME TAX AND GST	• CO1:Impart basic knowledge and equip students with application of principles and provisions Income - tax Act, 1961 and GST Act 2016

6	BCM6B13	AUDITING AND CORPORATE GOVERNANCE	• CO1:Provide knowledge of auditing principles and techniques and to familiarize the students with the understanding of issues and practices of corporate governance in the global And Indian context.
6	BCM6B14	FUNDAMENTALS OF INVESTMENT	• CO1: Familiarize the students with the world of investments. And to provide a theoretical framework for the analysis and valuation of investments.
6	BCM6B15	FINANCIAL DERIVATIVES	• CO1:Acquire knowledge about financial derivatives and their features .And to know about various risks associated with derivatives
6	BCM6B16	PROJECT	• CO1: The main objective of this project work leads the students to discover new knowledge in their subject area.

DEPARTMENT OF SOCIOLOGY

Programme Specific Outcomes:- BA Sociology

• Getting an exposure to the fundamental concepts and theories in acquiring skills for sociological imagination
• Achieve critical sensibility towards social, economic and political situation and to develop critical thinking ability
• Exhibit oral and written communication skills in disseminating sociological knowledge
• Improve proficiency in applying sociology and enhance employability Broadly, three orientations can be delineated with reference to the teaching of sociology ➢ Social orientation (as in responsible citizenship education) ➢ Knowledge orientation (as in personality and skill development), ➢ Job orientation (as in vocational courses)
• Keeping these orientations in mind, the Board of Studies emphasizes the following as objectives of sociology education: ➢ [a] to equip the students to critically understand and interpret social reality ➢ [b] to generate in students a distinct sociological perspective on socioeconomic and cultural ➢ reality ➢ [c] to enhance the social sensitivity and sensibility of the students ➢ [d] to help students acquire skills that will be useful to them in their personal and professional life.
• It is of the view that assessment should support and encourage broad instructional goals such as basic knowledge of the discipline of sociology including phenomenology, theories, techniques, concepts and general principles, encouragement of students' attributes including curiosity, creativity and reasoned skepticism and understanding the link of sociology to other disciplines. With this in mind it aims to provide a firm foundation in every aspect of sociology and to explain the modern trends in sociology.

Course outcomes

Semester	Course Code	Course Name	Course outcomes
I	SGY1B01:	BASICS OF SOCIOLOGY	• Comprehension of the uniqueness of the sociological imagination • Recognizing the difference between sociology and commonsense • Conceptualization of society in the abstract

			• Understanding the relation between the individual and society • Understanding the parts and processes within society
II	SGY2B02	INDIAN SOCIETY: STRUCTURE AND TRANSFORMATION	• To develop a sociological perspective for understanding the dynamics of Indian Society • To sensitive the changes occurred in the various institutions in Indian Society • To aware the issues and challenges of contemporary society
III	SGY3B03	SOCIOLOGICAL THEORY: AN INTRODUCTION	• To provide an understanding of the historical condition in which sociology originated and developed as an independent academic discipline . • To understand the intellectual and philosophical foundations of Sociological theories and contributions of Classical theorists to Sociology
IV	SGY4B05	INTRODUCTION TO SOCIAL RESEARCH	• To familiarise the nature and scope of social research • To understand steps and methods of social research • To distinguish the characteristics of qualitative and quantitative research
	SGY4B06	SOCIOLOGY OF KERALAM	• Recollect the social and cultural history of Kerala society • Understand the major social transformation in Kerala and its implications in present society • Analyses various socio cultural issues concerning Kerala society through sociological lens.
V	SGY5B07	SOCIAL ANTHROPOLOGY	• Understanding the basic concepts of Anthropology

			• familiarize with Anthropological studies in India by focusing on Tribal Communities in the country in general and in the state of Kerala in particular
	SGY5B08	SOCIOLOGY OF RURAL AND URBAN SOCIETIES	• Understanding major concepts and theoretical perspectives in urban sociology Familiarizing the views on urban social life • Understanding the nature of urbanisation process in Indian context • Perceiving the urbanisation process as a spatial transformation with a focus on Kerala scenario • Achieve critical sensibility towards social, economic and political dimensions involved in decentralized governance in Kerala and their impact on land use pattern.
	SGY5B09	WOMEN IN CONTEMPORARY SOCIETY	• Understanding some major themes in gender knowledge • Conceptual clarity regarding women's studies and feminism • Grasp on structural issues faced by women • Knowledge about factors affecting the status of women in Kerala over time • Critical awareness regarding women empowerment in Kerala
	SGY5B10	ENVIRONMENT AND SOCIETY	• Learn the principles and major areas in the areas of sociology of environment. • Understand the relationship between environment and human society. • Comprehend the necessities of having environmental awareness.

			• Gain awareness of the various environmental issues confronting in our immediate surroundings.
	SGY5&6B:	PROJECT WORK	
VI	SGY6B11	INVITATION TO SOCIOLOGICAL THEORY	• Traces the transformation from social thought to Sociological theory • Identifies the basic components of theory • Develops a sociological thinking • Recognizes the paradigmatic orientations in Sociology • Evaluates Sociology as a humanistic discipline
	SGY6B12	SOCIAL PSYCHOLOGY	• Understanding of basic concepts in social psychology • Understanding the basic psychological Process • Aware the significance of attitude in developing social behavior • Basic understanding on personality and its relation with social system
	SGY6B13	POPULATION STUDIES	• To provide a basic theoretical explanation of population studies and related concepts. • To provide critical analysis of the population theories • To analyse the changes in population in society
	SGY6B14	POLITICAL SOCIOLOGY	• familiarizing the theoretical and conceptual discussions on Power and Politics • Understanding the dynamics of Power • Critically evaluating the political process in India

	SGY6 B15	LIFE SKILL EDUCATION (ELECTIVE CORE COURSE FOR SINGLE CORE/SDE)	• To provide with the knowledge of necessary life skill for the application in everyday life • To enhance the quality of addressing issue relevant to the life situations • To enable the students to establish productive interpersonal relationships with others • To equip students for handling specific issues

DEPARTMENT OF HISTORY

Programme Specific Outcomes (Psos) – BA History Programme

	Programme specific outcomes
PSO1	Inculcating curiosity about the past
PSO2	Imparting intellectual skills to make sense of the past
PSO3	Developing the critical faculty of the sense of the students
PSO4	Developing an understanding of the presentence of the past

Course Outcomes

SEMESTER	SUBJECT CODE	PAPER	COURSE OUTCOMES
I	:HISIB01	Trends in Historiography	• CO1:Understand what is historiography • CO2:The emergence of historiography as a new discipline • CO3:hat led to the beginning of the tradition of historiography • CO4:Understand the Indian perceptions of history, vedic texts, ithihasa purana traditions etc. • CO5:Create a critical understanding of Prasastis, dynastic hronicles, the concept of time in india • CO6: How the records of the Accounts of travelers , traders and geographers, biographies and autobiographies, gazatteers used as the sources of history. • CO7: Understand the development of Vernacular writings and romances in india, historical works under vijayanagara • CO8:Study the concept of The concept of 'orient', Portuguese and dutch writings, Asiatic society, work of indologists

			• CO8 : Study the emergence and imact of new trends in historiography like Marxist attempt ,DD Kosambi, Indian feudalism, subaltern studies, post colonial perceptions etc.
II	HIS2BO2	TRENDS IN INDIAN HISTORIOGRAPHY	• CO1: Understand the development of time in early India • CO2: understand the early historic writings in early India • C03: Comparative study of Jain and Buddhist historiography • CO4: Develop a critical understanding of the historicity of Charitams • CO5: Make an awareness of the historical writings of ancient and medieval and modern period • CO5: Study about the development of modern trends in historical writing

DEPARTMENT OF POLITICAL SCIENCE

Programme Specific Outcomes(PSOs) – B. A Political Science Programme

- This programme aims to give the students a comprehensive knowledge about the various concepts and principles of Political Science, develop a clear understanding of the working of Indian political and administrative system and promote and nurture among students a sense of responsible citizenship.
- Through this programme and the various courses offered, all those undergoing the programme will also get a clear understanding of the various issues that any type of government would have to deal with , both at the national and international front and the various provisions therein ,according to the constitution. It also aims to make the students aware about a citizen's rights and duties and help develop in them confidence and commitment to participate and contribute in the formation, formulation and functioning of the various governmental structures and mechanisms

Course Outcomes

SEM	Course code	Course Name	Course outcomes
1	POL1BO1	Foundations of Political Science	• This course introduces fundamentals of Political Science, its history and approaches, and an assessment of its critical and contemporary trends. This course aims to introduce certain key aspects of conceptual analysis in Political Science and the skills required to engage in debates surrounding the application of the concepts
2	POL2BO2	Concepts of Political Science	• This course introduces basic concepts and ideas in Political Science. This course aims to develop among students a clear understanding of some of the important ideas in the discipline. This would enable the students to understand and analyze the polity and society in which they live
3	POL3BO1	Indian Government and Politics	• Major objective of this course is to help students to understand the constitutional development in India and evolution of modern governmental structures. The

			other focus is to introduce salient features of Indian Constitution, Union Government, State governments, and Local Self-Governments. Study of Indian judicial system, its functioning and recent trends is also included in this course.
3	POL3BO2	World Constitutions: Comparative Analysis	• The main objective this course is to develop awareness and familiarize students about various types of political system and constitution of different countries. To enable them to have knowledge on constitutionalism, federal and parliamentary form of government and role of executive, legislature, and judiciary in major states in the world.
4	POL4BO1	Ancient and Medieval Thought	• The main objective of this course is to create in-depth knowledge about modern and medieval political thought among students. The course also discusses key concepts - state, government, law, justice, etc.,- of western and Indian political tradition.
4	POL4BO2	Issues in Indian Politics	• This paper introduces socio-economic factors like caste, religion and class in Indian Politics. Apart from that the focus is to analyse trends in Indian electoral politics, various party systems, role and support base of national and regional parties and their policies and programmes. The discussion of secularism, communalism and role of marginalized sections is another focus of this course.
5	POL5BO1	Research Methodology	• Through this course the students are introduced to various research methods used in social science research. The course is expected to develop comprehensive knowledge and necessary skills

			for conducting research.
5	POL5BO2	Modern Western Political Thought	• This course introduces important streams in modern western political thought. It provides a fairly comprehensive overview of the major western political thinkers and their ideas. The course as a whole is meant to provide a sense of the broad streams of modern western political tradition while encouraging a specific knowledge of individual thinkers.
5	POL5B03	State, Society and Political Process in Kerala	• The course intends to create an in-depth understanding of modem Kerala, its society, polity and economy. It has been structured to provide a detailed account of the evolution of socio-political processes, social and political movements, governmental actions, etc. that led to the formation of present day Kerala. The course also gives a comprehensive analysis of Kerala economy, its contemporary challenges and the problems faced by some of the important sections of the state.
5	POL5 BO4	Introduction to International Politics	• This paper aims to equip students with the basic intellectual tools for understanding International Relations. It introduces some of the most important theoretical approaches in international relations. The Course also contains different concepts in International Relations such as power diplomacy and foreign policy.
5	POL5DO2	Human Rights (Open course)	• The course aims to develop in-depth understanding of the concept of human rights and the different approaches to it. The course also discusses major international instruments and

			institutions for the protection of human rights. Students are expected to know about major challenges to human rights and important laws for its protection in India by the end of the course.
6	POL6BO1	Modern Indian Political Thought	• The course intends to provide insights into the different traditions of Indian political thinking. It attempts to equip students to familiarise with ideas of modern political thinkers in India and develop their own notions of socio-political issues.
6	POL6BO2	India's Foreign Policy	• The course tries to build clear idea about the fundamentals of India's foreign policy. It strives to familiarize students with the basic principles, objectives, structures and processes of India's foreign policy formulation. It also discusses India's engagements with international institutions, • regions and states, as well as some of the major issues and challenges of foreign policy.
6	POL6BO3	Issues in International Politics	• The course intends to familiarise students with the main issues and concerns of the contemporary international order. It discusses a range of themes in international politics with a view to developing critical insights on contemporary questions.
6	POL6 B04	Introduction to Public Administration	• In this course the students are provided an introduction to the discipline of Public Administration with a special focus on contemporary administrative developments. The course explores some of the systems and structures in public administration. The paper contains certain classical and contemporary administrative

			theories. The course also provides the students a comprehensive understanding on major elements of public administration
6	POL6 B07	International Organisations & Administration(Elective)	• The course contains discussion about the evolution and growth of international organisations and its importance in contemporary global order. Detailed study of various types of international organisations, their role in building rules and norms in international life is the aim of this course

DEPARTMENT OF ENGLISH

Programme Specific Outcomes (PSOs) – B. A. Functional English Programme

	Programme specific outcomes
PSO1	To help learners gain better listening, speaking, reading and writing skills so that they can express themselves fluently in personal and professional contexts.
PSO2	To develop critical thinking ability and sensibility towards social, economic and societal situations by reading the texts from various genres of literatures.
PSO3	To get an awareness of the basic concepts and theoretical frameworks of Creative Writing, Translation Studies, Film Studies, Theatre for Communication, Advertising, Business English, Linguistics, English and Communication Technology and to develop research aptitude by learning literary and cultural theories
PSO4	To help learners to improve their proficiency in applying various skills in their personal and professional lives thereby enhancing their employability prospects.

COMMON COURSES: COURSE OUTCOMES

Semester	Course Code	Course Name	Course Outcomes
I	A01	Transactions: Essential English Language Skills	• Learners get a general awareness of pronunciation, vocabulary and grammar of English Language and acquire essential LSRW skills needed for academic transactions, discussions presentation and debating.
	A02	Ways with Words: Literatures in English	• Learners get acquainted with some of the landmark texts — poems, short stories and prose writings — from different literatures of English all over the world and get enlightened by the experience of reading them.
II	A03	Writing for Academic & Professional Success	• Learners learn to develop writing skills and integrate writing and thought, to acquire the correct sense of format, syntax, grammar, punctuation and spelling along with the concepts, principles and vocabulary of reasoning and argumentation and use analysis, synthesis and evaluation of advance arguments.

	A04	Zeitgeist: Readings on Society and Culture	• Learners are familiarized with some of the renowned writings related to the Indian Constitution and Secularism, Sustainable Environment, Gender and Human Rights to become socially committed citizens.
III	A05	Signatures: Expressing the Self	• Learners are introduced to an interesting collection of personal narratives of the world-renowned personalities which includes autobiographical writings, memoirs, speeches, testimonies, diaries and letters that enable them to understand "how personal narratives interest with the larger social realities" and to realize that personal narratives are not about individual stories, but encompass the collective self.
IV	A06	Spectrum: Literature and Contemporary Issues	• Learners become aware of the humanist dimensions of literature and media in the contemporary world enabling them to understand concepts like globalization, commercialization, intellectual property rights through literature, inculcating the spirit of universal brotherhood by presenting critiques of race, xenophobia, war and national borders and disseminating knowledge about the rights of minorities such as children, animals and the disabled and thus creating a positive change in the societal perception of them.

CORE, COMPLEMENTARY AND OPEN COURSES: COURSE OUTCOMES

Semester	Course Code	Course Name	Course outcomes
I	FEN1B01	Core Course-I: Communication Skills in English	• Learners improve their ability to express themselves in English in formal and informal situations.
	FEN1(2)CO1	Complementary Course-I Literatures in English: From Chaucer to the Present	• Learners become familiar with the various movements and ages in English literature, get acquainted with the great classics in English literature and get enlightened by the experience of reading great works of literature.
II	FEN2B02	Core Course-II Advanced English Grammar	• Learners get exposed to the advanced level of grammatical patterns and usages in English and improve their skills to speak and write English accurately.

	FEN1(2)CO2	Complementary Course-II Cultural Studies: Perspectives in Culture	• Learners are able to discover the contours of Cultural Studies as a field of inquiry, situating their learning within explorations of the disciplinary and historical context of the field andto use interdisciplinary critical perspectives to examine the diverse and sometimes contested meanings of cultural objects and processes, establishing a basic knowledge of the theoretical paradigms of Cultural Studies.
III	FEN3B03	Core Course- III Language and Technology	• Learners get skills in using the internet as a potential tool for language learning and acquire skills to use smartphones for better communicative mastery in English.
	FEN3B04	Core Course IV Applied Phonetics	• Learners are able to identify distinctive English sounds, its production and the varied phonetic symbols and to handle the target language effectively in an internationallyacceptable manner.
	FEN4(3)CO1	Complementary Course III- Literatures in English: American and Postcolonial	• Learners get acquainted with some of the landmark texts of American Literature through the ages and a general understanding of the variety of postcolonial writings and the diverse voices that constitute postcolonial identity.
IV	FEN4B05	Core Course V Fundamentals of Linguistics	• Learners understand the relationship between linguistics and related disciplines, to use linguistics as a tool in understanding and processing written or spoken text and acquire better communication and analytical abilities in English.
	FEN4B06	Core Course VI Business English	• Learners get a comprehensive idea about business correspondence, develop ability to prepare business letters, business reports, technical proposal and the like which in turn, develop their employability skills.
	FEN4(3)CO2	Complementary Course-IV Cultural Studies: Cultural Spaces	• Learners are able to connect cultural knowledge to everyday life and practices, gaining a preliminary understanding of the relationship of methodology (paradigms for study) to inquiry in Cultural Studies.

V	FEN5B07	Core Course VII Translation Studies	• Learners have an overall view of basic theories of translation and acquire the skill in translating various kinds of texts.
	FEN5B08	Core Course VIII Print Media	• Learners get knowledge of the history of the media, acquire functional knowledge of the fundamentals of media writing and develop the skill by practice of writing editorials, features, reviews and the like.
	FEN5B09	Core Course IX Theatre For Communication	• Learners become familiar with the theories related to drama and theatre, both eastern and western from Bharata and Aristotle to modern theatre and able to understand and analyse plays.
	FEN5B10	Core Course X Contemporary Literary Theory	• Learners gain a basic understanding of the 20th century Literary Theories and Critical Approaches which in turn enhance the taste of research in them.
	FEN5D02	Open Course: Language ForAdvertising: Theory & Practice	• Learners get an understanding of the techniques and procedures involved in advertisement production and to analyse advertisements in terms of creativity and execution.
VI	FEN6B11	Core Course-XI English Language Teaching	• Learners are able to teach basic English language components in an effective way, to understand and achieve the rudimentary skills for being a successful English teacher, to realize the roles of a teacher/learner in making the process of teaching interactive and outcome-based and to acquire better presentation and communication abilities in English.
	FEN6B12	Core Course XII Electronic Media	• Learners get familiarized with the fundamentals of electronic media and a basic knowledge of the fundamentals of writing for the electronic media.
	FEN6B13	Core Course-XIII Creative Writing	• Learners learn how to identify and appreciate various writing styles, to develop abilities to critically reflect on other's writings from different angles and acquire skills to prune their writing skills and analytical skills.
	FEN6B14	Core Course XIV Film Studies	• Learners develop skills to appreciate film as an art form and its aesthetics, get an understanding of visual aesthetics, forms and technological innovation and develop skills to connect films with history,

			politics, technology, psychology and performance.
	FEN6B15	Core Course XV Language for Advertising: Theory & Practice	• Learners are able to get a general awareness of the role of advertising andto examine the importance and use of creativity in advertising.
	FEN6B17	Project Work	• Learners get a space to express their talents and skills in creating their own artifact/product based on the knowledge and art they have acquired through their project works.

AUDIT COURSES

Semester	Course Code	Course Name	Course Outcomes
I	AUD1E01	Environment Studies	• Learners get familiarized with the fundamentals Environment Studies, concepts of sustainability a sustainable development, renewable and non-renewal resources, ecosystems, biodiversity and its conservatio role of an individual in the prevention of environmen pollutions and environmental policies and practices become eco-friendly socially responsible individuals.
II	AUD2E02	Disaster Management	• Learners are able to get a general awareness of natural and man-made disasters, disaster prevention and mitigation and disaster preparedness and management.
III	AUD2E03	Human Rights	• Learners get an awareness of the concept of human rights: meaning, evolution and importance, UNO and human rights, Indian constitution and human rights and challenges to human rights to become socially responsible individuals.
IV	AUD2E04	Gender Studies	• Learners are able to define and utilize key concepts and terminology central to Gender Studies and analyze complex interconnections of gender, race, class, sexuality, ability, and other categories of power and identity in various spheres of human endeavor ranging from the sociopolitical to the aesthetic.

DEPARTMENT OF B. VOC

Programme Specific Outcomes (PSOs) –Software Development

PSO1	Understand analyze and develop computer programs in the areas related to web design, mobile application design.
PSO2	Apply standard software engineering process and strategies in software project development using open source programming environment to deliver a quality product for business success.
PSO3	Acquaintance with latest trends in software development and thereby innovate new ideas in the area of software development.
PSO4	Conceptual grounding in computer usage as well as its practical business applications.
PSO5	To demonstrate advanced skills in the effective analysis design and realization of business system utilizing contemporary information technology.

Course Outcomes

SEMESTER	COURSE CODE	COURSE NAME	COURSE OUTCOMES
I	GEC1DM03	Discrete Mathematics	• CO1: Equip the students with basic principles of Discrete Mathematics. • CO2: Learn the mathematical logic & Boolean Algebra • CO3: Learn the basics of Groups & Rings
	SDC1IT01	Fundamentals of Computer & Programming in C	• CO1: Knowledge and Understanding: On successful completion of this subject the students have the programming ability in C Language. • CO2: Intellectual Cognitive/ Analytical Skills: Enhancing Logical Thinking and Reasoning Skills through Collaborative Learning in C Programming. • CO3: Practical Skills: Students would be capable of developing various applications to solve deluge of real world problems. They can also learn to make system software as well as application software. These existing languages

			could become base for developing new languages which can inherent its features. On the backend of various embedded systems, these languages are deployed. • CO4: Transferable Skills: In many multinational companies they can work effectively in a group or team to achieve goals and can show initiative and leadership abilities.
	SDC1IT02	Internet Programming	• CO1: Get an exposure to develop and design simple web applications Create interactive web applications having images and animations • CO2: Knowledge and Understanding: Students will a) know how to define internet, www, various protocols, b) understand the working of internet c) create email id and use it for sending online mails and attachments d) Students will understand and be able to describe the differences between internet and intranet. • CO3: Intellectual(Cognitive/ Analytical) Skills: Students will be able to a) identify which medium and topology should be used for networking b) They will be able to judge which connection should they use for getting an internet at home or work. c) Browsing at high sped using keywords • CO4: Practical Skills Students will learn to: a) Able to create HTML based web pages b) Dynamicity to web page using JavaScript. c) Create email ids Surf net using shortcuts. • CO5: Transferable Skills : Students will be able to a) Create projects and earn money by selling them
	SDC1IT03 (P)	Programming in C - Lab	• CO1: Understand and practice the computer programming.

			• CO2:Solve mathematical or scientific problems using C.
	SDC1IT04 (P)	Internet Programming -Lab	• CO1: Understand and Practice web development • CO2:Get hands on interactive web, JavaScript and CSS • CO3: Develop and design web application having images and animations
II	GEC2NM06	Basic Numeric Skills	• CO1: Solve problems linear equations, metrics and progressions. • CO2:Solve statistical problems and analyze data.
	SDC2IT05	Data Structures	• CO1: Get an idea of various data structure and their implementations. • CO2: Knowledge and Understanding: a) Define basic static and dynamic data structures and relevant standard algorithms for them: stack, queue, dynamically linked lists, trees, graphs, heap, priority queue, hash tables, sorting algorithms. b) 2.Demonstrate advantages and disadvantages of specific algorithms and data structures, c) 3.Select basic data structures and algorithms for autonomous realization of simple programs or program parts d) 4.Determine and demonstrate bugs in program, recognize needed basic operations with data structures e) 5.Formulate new solutions for programming problems or improve existing code using learned algorithms and data structures, f) 6. Evaluate algorithms and data structures in terms of time and memory complexity of basic operations. • CO3: Intellectual Skills: a) Ability to define the computer science problems. b) Ability to drive different solution alternatives for the computer science problems.

			c) Ability to analyze the solution alternatives and choose the optimum one. • CO4: Practical Skills: Design, build and develop programs of varying levels of complexity. • CO5: Transferable Skills: Knowledge of the concepts and material presented in this course will provide the students with the capability to: a) Use data structures effectively to solve practical problems. b) Write and present effective computer programs that employ efficient algorithms. 3. Work in stressful environment and within constraints. c) 4. Search for information and adopt life-long self-learning.
	SDC2IT06	Programming in Java	• CO1: Learn the OOPS Concept and use object oriented approach for solving real life problems • CO2: Develop GUI based applications using java
	SDC2IT07 (P)	Data Structures through Java - Lab	• CO1: Implement various data structures and to solve real life problems using data structures. • CO2: Expertise in java programming
	SDC2IT08 (Pr)	Mini Project	• CO1: Develop software development skills • CO2:Provide a solution for a real life situation. • CO3: Get a chance to utilize and implement the skill acquired.
III	SDC3IT09	Basic Networking Concepts	• CO1: Understand the basics of data communication and exchange • CO2:Understand various techniques and rules for device communication
	SDC3IT10	Introduction to RDBMS and SQL	• CO1: Understand the need and working of Data Base and Data Base Management Systems. • CO2:Learn the basic principles of database models and database design. • CO3: Learn the basic of RDBMS and data manipulation using SQL.

	SDC3IT11(P)	Networking - Lab	• CO1: Learn the basics of network administration Set up and configure LAN and DNS server.
	SDC3IT12(P)	Database - Lab	• CO1:Learn data base administration • CO2: Expertise SQL programming
IV	GEC4SE11	Software Engineering Principles	• CO1: Learn engineering practices in Software development • CO2: Learn various software development methodologies and practices. • CO3: Learn various Evaluation methods in Software Development
	GEC4ED12	Entrepreneurship Development	• CO1: Familiarize the students with the concept of entrepreneurship • CO2: Identify and develop the entrepreneurial talents of students • CO3: Generate innovative business ideas in emerging industrial scenario
	SDC4IT13	Operating Systems	• CO1: Learn the basic concepts and functions of operating system Understand processes and its life cycle. • CO2: Learn and understand various Memory and Scheduling Algorithms. • CO3: Gain an overall idea about the latest developments in Operating Systems
	SDC4IT14	Advanced Computer Networks	• CO1: Get an outline on TCP/IP networks and its protocols. • CO2: Learn about wireless, mobile network and associated technologies
	SDC4IT15(P)	Networking & OS - Lab	• CO1: Learn to set up intranet Services, wireless networks and web servers • CO2: Get a basic idea of router configuration and LAN interconnections Learn socket programming.

			• Learn Linux administration and shell scripting.
	SDC4IT16 (Pr)	Project	• CO1: Implement the theoretical knowledge gained from various areas to develop effective solutions to various real life computing problems • CO2: understanding and solving problems in the field of computing.
V	GEC5HR13	Human Resource Management	• CO1: To familiarize the students with the different aspects of managing Human Resource in the Organization • CO2: To equip the students with appropriate knowledge and skills required for acquisition, development and retention of Human Resources
	SDC5IT17	.Net and Database Administration	• CO1: Learn the basic of .NET technology Expertise web development.
	SDC5IT18 (E1/E2)	J2EE Programming and Mobile Web	• CO1: Learn distributed enterprise applications using java. • CO2:Learn web development and server side programming using java Learn database managements and spring frameworks.
	SDC5IT19 (E3/E4)	Mobile Software Development using Android	• CO1: Develop mobile applications with Google Android Platform • CO2: Learn more about mobile operating system • CO3:Get an insight to cross-platform mobile app development
	SDC5IT20(P)	.Net and Database - Lab	• CO1: Develop applications with C#.Net and ASP.Net • CO2: Develop mobile web and applications that runs on multiple platforms.
	SDC5IT21(P)	Android - Lab	• CO1: Practice and implement the theoretical knowledge acquired in the selected elective course. • CO2: Develop industry standard applications with real life implications.

VI	SDC6IT22 (Pr)	Internship & Project	• CO1: Utilize the theoretical knowledge and practical experiences to solve a real life problem with high standard and accuracy • CO2: Get feel of organizational atmosphere and their practices • CO3: Induce confidence to manage large engineering project and make work ready

DEPARTMENT OF B. VOC

Programme Specific Outcomes (PSOs) – B.Voc Multimedia Programme

	Programme specific outcomes
PSO1	The programme is a suitable option for students to develop higher levels of creativity, when it comes to image editing, video editing, animation, advanced modelling, and a lot more
PSO2	With the increasing variety and range of hardware and software used for Multimedia and Web-Site Design, the demand for the manpower in these fields has escalated. This training program has been envisaged with an objective to develop specialized manpower required for these activities.
PSO3	Student will develop multimedia skills understanding the principal players of individual players in multimedia teams in developing projects.
PSO4	Students will understand the hardware and software needed to create projects using creativity and organization to create them.
PSO5	Students will learn copyright laws associated with multimedia.
PSO6	To learn all aspects of film production from the perspective of a film producer and also the film director, To provide knowledge of all legal aspects of film production, to impart knowledge on budgeting, to help understand all business models for cinema and television for distribution and revenue generation

Course Outcomes

SEM	Course Code	Course Name	Course outcomes
I	GEC1FC02	Fundamentals of C omputer	• CO1:Understanding the concept of input and output devices of Computers and how it works and recognize the basic terminology used in computer programming
			• CO2:describe the organization and operation of a computer processor, primary and secondary memory, peripheral devices and to give computer specifications
			• CO3:Describe various types of networks network standards and communication software.
			• CO4:Identify categories of programs, system software and applications. Organize and work with files and folders.
			• CO5:Describe the usage of computers and why computers are essential components in business and society
I	SDC1MM01	Office Automation & Malayalam Computing	• CO1: 0ffice tools course would enable the students in crafting professional word documents, excel spread sheets, power point presentations using the Microsoft suite of office tools.

			• CO2:To familiarize the students in preparation of documents and presentations with office automation tools.
			• CO3:The students will be able to perform documentation, to perform accounting operations, to perform presentation skills
			• CO4:Strengthen local language; Malayalam, using the possibilities provided by Information and Communication Technologies.
I	SDC1MM02	Internet Programming	• CO1: The course will give you a grounding in the nuts and bolts of the tags, script, and code that create web pages. It will not turn you into a programmer, but it will help you understand how the web and web pages work.
			• CO2:This knowledge will allow you to build on the skills you will have and to understand the potentials and limitations placed on writing for web pages.
			• CO3:Explain how the client-server model of Internet programming works
			• CO4:Understand how CSS will affect web page creation.
I	SDC1MM03 (P)	Office Automation & Malayalam Computing(Lab)	• CO1: To familiarize the students in preparation of documents and presentations with office automation tools.
			• CO2:Students would be able to documents, spreadsheets, make small presentations and would be acquainted with internet.
			• CO3:Students in crafting professional word documents, excel spread sheets, power point presentations using the Microsoft suite of office tools. To familiarize the students in preparation of documents and presentations with office automation tools.
			• CO4:the students will be able to perform documentation, to perform accounting operations, to perform presentation skills
I	SDC1MM04 (P)	Internet Programming Lab	• CO1: Analyze a web page and identify its elements and attributes.
			• CO2:Create web pages using HTML and Cascading Style Sheets
			• CO3: Create a web page multiple types of style sheet used in a single page
			• CO4:Skill in Design and development of web-pages
II	GEC2NM06	Basic Numeric Skills	• CO1:Develops the students ability to deal with numerical and quantitative issue in business

			• CO2:Conduct basic statistical analysis of data
			• CO3:Solve problems linear equations, metrics and progressions
			• CO4:Solve statistical problems and analyze data.
II	SDC2MM05	Multimedia Tools & Techniques	• CO1:Provide an understanding of the fundamental elements in multimedia. The emphasis will be on learning the representations, perceptions and applications of multimedia.
			• CO2:Software skills and hands on work on digital media will also be emphasized
			• CO3:The students will understand the technologies behind multimedia applications and master the skills for developing multimedia projects.
			• CO4:To demonstrate how still images, sound, and video can be digitized on the computer.
II	SDC2MM06	Photography & Visual Effects	• CO1:Understanding of the industrial and commercial applications of photographic techniques
			• CO2:Create photographic images utilizing a variety of technologies and workflow processes (image capture, manipulation, output, and distribution) in alignment with conceptual/visual objectives.
			• CO3:Understand different camera modes, shots, angles, lighting, visual effects and paint effects.
			• CO4:Work as a professional, maintaining high standards of practice and apply principles of composition to produce professional images.
II	SDC2MM07 (P)	Multimedia Tools & Techniques Lab	• CO1: Students will work with all aspects of images.
			• CO2:Improving design skill for students by learning different designing softwares.
			• CO3:Develop skills for creating images, brochures, logos etc.
			• CO4:Understanding color correction, compositing, manipulation and can create their own ideas.
III	GEC3CW08	Creative writing TV and Film	• CO1: Focuses on writing and submitting both drama and screen scripts for class discussion and analysis
			• CO2:Demonstrate familiarity with the elements of drama—such as plot, character, diction, theme, and spectacle—as well as an understanding of how these elements combine to create a theatrical experience.
			• CO3:To train students with the practical skills for writing scripts

			• CO4:Students will learn how to write scene description, to describe characters and locations, and to develop dramatic conflict, climax, romance and humor.
III	GEC3ES09	Environmental Science	• CO1:Get a basic idea of environment, environment al resources and their importance.
			• CO2: Learn the interrelationship between man, soc iety & environment.
			• CO3: Learn about ecosystem and biodiversity.
			• CO4: Learn the impact of pollution and role of ma nkind to eradicate pollution.
III	SDC3MM09	Digital Video Production	• CO1:Learn how to combine basic design principles in video editing, cuts and transitions.
			• CO2: Develop knowledge of established field video genres and techniques, camera angles and movements.
			• CO3: Develop project ideas, treatments, and other pre-production materials, and produce an idea as a high quality finished video product
			• CO4: Master the basics of operating video field equipment (camera, audio, lighting).
III	SDC3MM10	Introduction to Animation	• CO1: Develop the knowledge of basic Animation and Introducing Adobe Flash 2D animation Software.
			• CO2: Understand more details about the working Environment of Adobe Flash.
			• CO3: Develop the knowledge of creating interactive Animation using Flash Action Script.
			• CO4: Understand more about Action script with basic programming.
			• CO5: Develop the knowledge of creating Flash Animation in Advance.
III	SDC3MM11 (P)	Animation Lab	• CO1:Understand the concept of animation and drawing perspective.
			• CO2:Understand the animation software; Adobe Flash
			• CO3: Develop the skill to create Flash Animation using Action Script.
			• CO4:Able to create Motion Animation combined with Action script using Adobe Flash.
III	SDC3MM12 (P)	Digital Video Production Lab	• CO1: Understand the video editing software; Adobe Premiere Pro

			• CO2: Understand the interface and workflow, titling, masking and exporting.
			• CO3: Edit and compress video for use in various delivery modes of digital media using standard digital video editing software.
			• CO4: Understand the conceptual and aesthetic styles, as well as their practical and technical skills.
IV	GEC4PP11	Pre-Production	• CO1:Familiarize the student with the script development and production process
			• CO2:Explain different shot types, story board, budgeting, audition and location planning
			• CO3:Describe different roles of a production crew appropriately to produce a documentary video.
			• CO4:Explain the camera angles, movements and composition principles.
IV	GEC4ED12	Entrepreneurship Development	• CO1:Familiarize the students with the concept of e ntrepreneurship
			• CO2:Identify and develop the entrepreneurial talen ts of students
			• CO3:Generate innovative business ideas in emergi ng industrial scenario
IV	SDC4MM13	Production and Post Production	• CO1: Analyze and discuss films of various genres and formal approaches in a range of theoretical and historical contexts.
			• CO2: Approach filmmaking practice as a means of storytelling, non-fiction narrative, and formal, technical and stylistic experimentation. Understand the professional requirements of all technical and creative roles involved in film production and post-production.
			• CO3: Demonstrate understanding of common post production techniques, standards and workflows. Student will be able to apply technical knowledge to capture, edit, monitor and compress digital video footage
			• CO4: Post-production provides the filmmaker in the following areas: picture editing, sound editing, sound mixing, music, and colour correction.
IV	SDC4MM14	Advanced Techniques In Graphics and Animation	• CO1:Familiarize the student with the Concept of 3D modeling
			• CO2:Understand 3D Animation Software Autodesk Maya in base level

			• CO3: Familiarize the student with the types and Principles of Animation
			• CO4: Understanding basic knowledge about the Animation tools in Autodesk Maya and Modeling tools.
IV	SDC4MM15 (P)	Graphics and Animation	• CO1: Familiarize the student with the Autodesk Maya Interface.
			• CO2: Familiarize them the most commonly used modeling tools in Maya.
			• CO3: Understand how to model anything in Maya.
			• CO4:Make the students familiar with camera movement, lighting and basic Rigging in Maya
V	GEC5HR13	Human Resource Management	• CO1:Understand about the role and managerial functions of a HR Manager and to learn about recruitment, training, performance appraisal and grievance system in an organization.
			• CO2:Familiarize the students with the different aspects of managing Human Resource in the Organization
			• CO3:Equip the students with appropriate knowled ge and skills required for acquisition, development and retention of Human Resources.
V	SDC5MM17	Media Laws and Ethics	• CO1:Understand the basic legal concepts and pres s laws.
			• CO2:Understand ethical issues in the current medi a scenario
			• CO3: Demonstrate an understanding of the nature of ethics and moral discourse
V	GEC5LS15	Life Skill Education & Presentation Skill	• CO1:Develop intrapersonal, interersonal, critical thinking, and decision making and communication skills.
			• CO2: Establish self management and help to maintain work life balance.
			• CO3: Get an insight to career planning and develo pment
V	SDC5MM18	Graphics and Animation in Advertising	• CO1: Demonstrate an understanding of the overall role advertising plays in the business world
			• CO2: Identify and understand the various advertising media.
			• CO3: Demonstrate an understanding of how an advertising agency operates.
			• CO4:Understand types of advertising, media and marketing mix.
V	SDC5MM19	3D, Scripting and Game Development	• CO1: Recap Animation Principles and understand the concept of Character Modeling.

			• CO2: Make them understand different type of Animation and some most common Animation softwares.
			• CO3: Familiarize the students with the most common post production Softwares.
			• CO4:Understand them about Game Development, its process and Software used.
V	SDC5MM20 (P)	Graphics and Animation in Advertising Lab	• CO1:To learn different type of graphics like vector and raster graphics
			• CO2:To apply tools and information to create graphics for digital and print media.
			• CO3:Understand the software's Adobe Photoshop, Adobe Illustrator, Adobe Flash and Adobe In Design
			• CO4:To apply the animation principles to create animated ads.
V	SDC5MM21 (P)	3D Scripting and Game Development Lab	• CO1: Familiarize the student with some advanced modeling Techniques.
			• CO2:Understand the students to Rig and Animate a Character using Maya.
			• CO3:Understand the software's After Effects, Adobe Premier Pro and sound editing software like Adobe Audition.
			• CO4:Understand about the Game Engine and Game Development and its Process.
VI	**INTERNSHIP**		

DEPARTMENT OF B. VOC

Programme Specific Outcomes (PSOs) – Banking Financial Services And Insurance

PSO1	Provides proficiency in sales, insurance ,mutual fund awareness and banking operations
PSO2	Accumulate knowledge to understand the changing national and global banking and insurance operations, technology and paradigm shift in the sectors.
PSO3	To give an adequate exposure to operational environment in the field of Banking & Insurance.
PSO4	Impart knowledge, understanding and key skills to graduates to be effective managers in financial instituitions
PSO5	To inculcate training and practical approach among the students by using modern technologies in the field of Banking and Insurance.

Course outcomes

Semester	Course Code	Course Name	Course outcomes
1	GECIBM03	(BC1B01)Business Management	• Evaluate organizational decisions with consideration of the political, legal and ethical aspects of business. • Assess Strengths, Weakness, Opportunities and Threats of the business environment • Apply conceptual learning skills in today's business environment
	SDC1BF01	Banking and Insurance	• To provide adequate basic understanding about the functions of banks and insurance. • To inculcate training and practical approach among the students by using modern technologies in the field of banking and insurance. • Understanding the principles of insurance.
	SDC1BF02	Financial Accounting	• Apply knowledge of Generally Accepted Accounting Principles (GAAP) and managerial accounting theories to business organizations and non profit organizations • Detailed understanding of accounting information systems, principles and concepts.

			• Combine practical and theoretical knowledge of financial accounting
	SDC1BF03(P)	Office automation tools & Communicative English	• Strong foundation in creating documents, spreadsheets, presentations using computers • Proficient in the use of software applications in various fields • Effective communication skills and produce words with right pronunciation
	SDC1BF04(P)	Financial Accounting using Tally	• Gain an indepth knowledge in accounting software practices using tally • Maintain Accounts with and without insurance • Familiarize with statutory features of tally
2	GEC2BN06	(BC3A11)Basic Numerical Skills	• Understanding mathematical relations arithmetic progressions etc • Solving and analyzing real world applications of finite and discrete mathematics • Solve equations and inequalities and its application real life
	SDC2BF05	Organizational Behavior and communication	• To analyze and compare different models used to explain individual behavior related to motivation and rewards • To identify the process used in developing communication and resolving conflicts • Group dynamics and demonstrate skills required for working in groups
	SDC2BF07(p)	Cost Accounting	• Role and concept of cost accounting in the business management of manufacturing and non manufacturing companies. • Understandings about cost, expense, loss and revenue • Preparation of budget in various fields
	SDC2BF07(P)	Cost accounting Lab & Bank test coaching	• Analyze and evaluate information for cost ascertainment ,planning, control and decision making • Developing competencies for competitive examinations
3	GEC3BS08	(BC5B10)Banking Service Management	• Make aware of basic services of banks • Understand procedures of various lending services • Precautions for banker and customers regarding various operations in banks • Know more about procedures of operating various accounts

	SDC3BF09	Marketing management	• Understanding of broad marketing functions in management • Understand fundamental marketing concepts, consumer behavior : product, price, place, distribution
	SDC3BF10	Life insurance operations	• Fundamental understanding about the various principles of life insurance • Knowing various risks associated with life • Procedures and principles of operating various types of policies
	SDC3BF11	Management Accounting, budgeting and forecasting	• Preparation of financial statements And its analysis • Identifying cash and non cash items • Analyzing cost volume profit techniques to determine optimal managerial decisions • Outline and apply various management tools and techniques
	SDC3BF12(P)	Digital Marketing lab-PSC Coaching	• Knowing various marketing techniques through digital medias • Acquiring competitive skills for various examinations
	SDC3BF13(P)	Financial analysis and budget preparation lab	• Acquiring skills of making various financial statements by making use of softwares
4	GEC4ED10	Entrepreneurship development	• Demonstrate an ability to work effectively with others • Ability to engage in critical thinking by analyzing situations and constructing and selecting viable solutions to solve problems • Resources needed for successful development of entrepreneurial ventures.
	SDC4BF14	General Insurance Operations	• Familiarize with various types of general insurance • Procedures involved in operating various types of general insurance policies
	SDC4BF15	Auditing and corporate governance	• External audit of corporate financial statements • Combining theories of auditing with practice • Understanding auditing ethics, audit process, auditors duties, liabilities etc
	SDC4BF16 E2	Risk management and insurance	• Demonstrate knowledge of the range of financial and financial related risks facing organizations • Understanding various risks and how to manage it.

	SDC4BF17(P)	General insurance lab & bank test coaching	• Familiarize with various types of insurance policies • Prepare for competitive examinations
5	GEC5HR11	(BC3C03)Human Resources Management	• Contribute to the development ,implementation and evaluation of employee recruitment ,selection, and retention plans and processes • Develop implement and evaluate employee orientation , training and development programs.
	GEC5AD12	Banking & Microfinance	• Identifying the role of microfinance • Identify reasons for intervening or not intervening in microfinance
	SDC5BF19	Mutual Fund operations	• Understanding the basic concepts of mutual funds • Awareness about types and working of mutual funds • Pricing, selling and investment management techniques and business ethics in mutual funds .
	SDC5BF20	Legal and regulatory aspects of banking	• Attainment of competence in the profession of banking and finance • Practical knowledge regarding the legal aspects of banking
	SDC5BF21	Corporate Accounting	• Ability to account for a range of advanced financial accounting issues • Understanding of advanced issues in accounting for assets, liabilities and owners liability. • Equip students with the preparation of financial accounts of corporate entities
	SDC5BF22	Micro finance operations – Lab and PSC Coaching	• Practical knowledge regarding the operations of micro finance • Preparations for PSC exams
	SDC5BF23	Mutual Funds & online share trading LAB	• Mutual fund operations
6	SDC6BF24(pr)	Internship & project	• Opportunity to experience what students have learned in class and to establish its relevance to the real world.

DEPARTMENT OF B. VOC

Programme Specific Outcomes (PSOs) :- Accounting And Taxation Programme

PSO1	Develop analytical skills and offer a solid grounding and professional competence in all aspects of accounting and taxation
PSO2	It will develop knowledge and understanding of concepts,principles,practices and procedures of accounting and taxation
PSO3	Acquaintance with latest trends in accounting field
PSO4	Have been cleared the basics regarding banking practices relevant for maintaining book of accounts and various other records,documents and vouchers basic to accounting activities
PSO5	They should have the ability to analyze data, calculation and basic understanding if GST and latest taxation laws

Course outcomes

Semester	Course Code	Course Name	Course outcomes
1	GECIBM03	(BC1B01)Business Management	• Evaluate organizational decisions with consideration of the political, legal and ethical aspects of business. • Assess Strengths, Weakness, Opportunities and Threats of the business environment • Apply conceptual learning skills in today's business environment
	SDC1AT01	Principles of Taxation	• Students will apply critical thinking and problem-solving skills related to taxation of individuals, flow through entities, and corporations.

			• Students will convert complex and technical tax terminology into language that translates to nontechnical audiences. This outcome allows students to demonstrate strong interpersonal communication skills that build relationships with clients over time • Students will be able to explain key differences in taxing policies related to expatriates and the countries they live and work in — allowing them to reflect on cultural and ethnic differences in approaches to business and taxation policies. • to provide students with a working knowledge of the fundamental tax principles and rules that apply to commonly encountered transactions undertaken by companies and individuals
	SDC1AT02	Financial Accounting	• Apply knowledge of Generally Accepted Accounting Principles (GAAP) and managerial accounting theories to business organizations and non profit organizations • Detailed understanding of accounting information systems, principles and concepts. • Combine practical and theoretical knowledge of financial accounting • Maintain the financial statements of a business entity and rectify errors in accounts.
	SDC1AT03(P)	Office automation tools & Communicative English	• Strong foundation in creating documents, spreadsheets, presentations using computers.

			• Proficient in the use of software applications in various fields • Effective communication skills and produce words with right pronunciation
	SDC1AT04(P)	Financial Accounting using Tally	• Gain an in depth knowledge in accounting software practices using tally • Maintain Accounts with and without insurance • Familiarize with statutory features of tally
2	GEC2BN06	(BC3A11)Basic Numerical Skills	• Understanding mathematical relations arithmetic progressions etc • Solving and analyzing real world applications of finite and discrete mathematics • Solve equations and inequalities and its application real life
	SDC2AT05	Direct Taxation I	• To enable students to appreciate the wider economic, social, administrative-compliance and political contexts within which taxes are imposed • Will be able to explain different types of incomes and their taxability and expenses and their deductibility • Will able to state the use of various deductions to reduce the taxable income. • Expose the participants to real life situations involving taxation and to equip them with techniques for taking tax-sensitive decisions.
	SDC2AT07(p)	Cost Accounting	• Define the various components of total cost of a product i.e. direct & indirect cost and fixed & flexible cost.

			• Determine various levels of material i.e. reorder level, minimum level, maximum level & EOQ for managing working capital. • Use methods of time-keeping & time-booking and manage idle & overtime. • Use cost-sheet to compute unit cost of product and Determine basis for computing tender price of a product. • Role and concept of cost accounting in the business management of manufacturing and non manufacturing companies. • Understandings about cost, expense, loss and revenue • Preparation of budget in various fields
	SDC2AT07(P)	Cost accounting Lab & Bank test coaching	• Analyze and evaluate information for cost ascertainment ,planning, control and decision making • Developing competencies for competitive examinations
3	GEC3BR08	(BC3B03)Busiess Regulations	• Appreciate the relevance of business law to individuals and businesses and the role of law in an economic, political and social context. • Identify the fundamental legal principles behind contractual agreements. • Examine how businesses can be held liable in tort for the actions of their employees. • Understand the legal and fiscal structure of different forms of business organizations and their responsibilities as an employer.

			• Acquire problem solving techniques and to be able to present coherent, concise legal argument.
	SDC3AT09	Organizational Behavior and Communication	• To analyze and compare different models used to explain individual behavior related to motivation and rewards • To identify the process used in developing communication and resolving conflicts • Group dynamics and demonstrate skills required for working in groups
	SDC3AT10	Direct Taxation II	• Ability to identify the difference between Tax Evasion, Tax Planning and Tax Avoidance. • Understanding of various deductions, rebates and reliefs to reduce the taxable income and tax liability. • Skill to take managerial decisions keeping in view the Income Tax Rules. • Knowledge of Double Taxation Avoidance Agreement.
	SDC3AT11	Management Accounting, budgeting and forecasting	• Preparation of financial statements And its analysis • Identifying cash and non cash items • Analyzing cost volume profit techniques to determine optimal managerial decisions • Outline and apply various management tools and techniques

	SDC3AT12(P)	Direct Taxation: TDS Return Filing lab	• To understand the provisions and procedure to compute total income under five heads of income i.e. salaries, house property, profits & gains from business & profession, capital gains and other sources. • To understand the provision and procedure for clubbing & aggregation of incomes and set-off & carry forward of losses. • To understand the various deductions to be made from gross total income U/s 80-C to 80-U in computing total income.
	SDC3AT13(P)	Financial analysis and budget preparation lab	• Acquiring skills of making various financial statements by making use of softwares
4	GEC4ED10	Entrepreneurship development	• Demonstrate an ability to work effectively with others • Ability to engage in critical thinking by analyzing situations and constructing and selecting viable solutions to solve problems • Resources needed for successful development of entrepreneurial ventures.
	SDC4AT14	Indirect Taxation	• Will able to Compute the assessable value of transactions related to goods and services for levy and determination of duty liability. • Identify and analyze the procedural aspects under different applicable statutes related to indirect taxation . • Understand the basic principles underlying the Indirect Taxation Statutes (with reference to Central Excise Act, Customs Act, Service Tax, Value Added Tax, Central Sales Tax).

			• Understand Tax liability and taxable entities. Accounting treatment (simple and trilateral transactions) . • Able to examine the method of tax credit. Inflows and outflows. Outflows: tax imposition, tax exemption, tax deduction. • Understand Inflows and outflows related to VAT. Imposition of tax and tax base. Delivery of goods and services. Tax rates . Periodic tax returns. Place of delivery of goods and services and its impact on VAT.
	SDC4AT15	Auditing and corporate governance	• External audit of corporate financial statements • Combining theories of auditing with practice • Understanding auditing ethics, audit process, auditors duties, liabilities etc
	SDC4AT16 E2	Risk management and insurance	• Demonstrate knowledge of the range of financial and financial related risks facing organizations • Understanding various risks and how to manage it. • Identify, interpret, and evaluate issues and implications associated with RMI in the global business environment. • Develop skills to facilitate insurance product cost and pricing, marketing, and distribution.
	SDC4AT17(P)	Indirect taxation - GST lab & bank test coaching	• Understand the basic principles underlying the Indirect Taxation Statutes (with reference to Central Excise Act, Customs Act, Service Tax, Value Added Tax, Central Sales Tax)

			• Compute the assessable value of transactions related to goods and services for levy • determination of duty liability Identify and analyze the procedural aspects under different applicable statutes related to indirect taxation • Apply the Generally Accepted Cost Accounting Principles and Techniques for determination of arm's length price for domestic and international transactions • Prepare for competitive examinations
	SDC4AT18(Pr)		• Gives students an idea on actual internship • Gaining industrial knowledge • Gaining knowledge on internship record frame work
5	GEC5HR11	(BC3C03)Human Resources Management	• Contribute to the development ,implementation and evaluation of employee recruitment ,selection, and retention plans and processes • Develop implement and evaluate employee orientation , training and development programs. • Learn the qualities of human resource manager in an organization. • Analysis the importance of different methods of training given to the employees in organization. • Memorize the difference between on the job training and of the job training. • Learn the participant of industrial relation and recruitment of good industrial relation programme.

	SDC5AT19	Marketing Management	• Understanding of broad marketing functions in management • Understand fundamental marketing concepts, consumer behavior : product, price, place, distribution • Understand the place and contribution of marketing to the business enterprise and identify the major basis of market segmentation. • To understand the concept of advertising and how this effect buying habits of consumers and to understand how to promote sale.
	SDC5AT20	Quantitative Techniques for Business	• Identify the source of a quantifiable problem, recognize the issues involved and produce an appropriate action plan • Calculate and interpret numerous statistical values and appreciate their value to the business manager • Understand why statistics are important for making business decisions • Be able to read and interpret statistical information and be able recognize when meaningful statistics are (and are not) being used • Be able to apply quantitative techniques to solve a variety of business problems
	SDC5AT21	Corporate Accounting	• Ability to account for a range of advanced financial accounting issues • Understanding of advanced issues in accounting for assets, liabilities and owners liability. • Equip students with the preparation of financial accounts of corporate entities

	SDC5AT22	Business Research Methods	• To understand the purpose of research. and to identify and understand potential ethical, empirical and analytical problems plaguing the research process and ways to overcome them. • To identify a business problem/ need, translate it into a research question, and design an appropriate way to answer it and formulate testable hypotheses and choose the most appropriate tools for testing them. • To identify and understand the main qualitative and quantitative methods of business research, their advantages and disadvantages and appropriate application areas. • To develop skills in choosing suitable case studies, sampling, measurement, questionnaire design, conducting interviews and surveys, leading focus groups.
	SDC5AT23	Digital Marketing lab-PSC Coaching	• Knowing various marketing techniques through digital medias • Acquiring competitive skills for various examinations
	SDC5AT24	Case Study: Business Research Methods (p)	• Students will be able to develop and evaluate alternate managerial decisions and identify optimal solutions • Students will demonstrate effective application capabilities of their conceptual understanding to the real world business situations

			• Students will be able to exhibit effective decision making skills, employing analytical and critical thinking ability
6	SDC6AT25(pr)	Internship & project	• Opportunity to experience what students have learned in class and to establish its relevance to the real world. • 6 months internship training programme at any related industry • Submission of internship report in a bound record form at the end of the programme • Monthly reviews by the respective guides

DEPARTMENT OF B. VOC

Programme Specific Outcomes (PSOs) – Banking Financial Services And Insurance

PSO1	Provides proficiency in sales, insurance ,mutual fund awareness and banking operations
PSO2	Accumulate knowledge to understand the changing national and global banking and insurance operations, technology and paradigm shift in the sectors.
PSO3	To give an adequate exposure to operational environment in the field of Banking & Insurance.
PSO4	Impart knowledge, understanding and key skills to graduates to be effective managers in financial instituitions
PSO5	To inculcate training and practical approach among the students by using modern technologies in the field of Banking and Insurance.

Course outcomes

Semester	Course Code	Course Name	Course outcomes
1	GECIBM03	(BC1B01)Business Management	• Evaluate organizational decisions with consideration of the political, legal and ethical aspects of business. • Assess Strengths, Weakness, Opportunities and Threats of the business environment • Apply conceptual learning skills in today's business environment
	SDC1BF01	Banking and Insurance	• To provide adequate basic understanding about the functions of banks and insurance. • To inculcate training and practical approach among the students by using modern technologies in the field of banking and insurance. • Understanding the principles of insurance.
	SDC1BF02	Financial Accounting	• Apply knowledge of Generally Accepted Accounting Principles (GAAP) and managerial accounting theories to business organizations and non profit organizations • Detailed understanding of accounting information systems, principles and concepts.

			• Combine practical and theoretical knowledge of financial accounting
	SDC1BF03(P)	Office automation tools & Communicative English	• Strong foundation in creating documents, spreadsheets, presentations using computers • Proficient in the use of software applications in various fields • Effective communication skills and produce words with right pronunciation
	SDC1BF04(P)	Financial Accounting using Tally	• Gain an indepth knowledge in accounting software practices using tally • Maintain Accounts with and without insurance • Familiarize with statutory features of tally
2	GEC2BN06	(BC3A11)Basic Numerical Skills	• Understanding mathematical relations arithmetic progressions etc • Solving and analyzing real world applications of finite and discrete mathematics • Solve equations and inequalities and its application real life
	SDC2BF05	Organizational Behavior and communication	• To analyze and compare different models used to explain individual behavior related to motivation and rewards • To identify the process used in developing communication and resolving conflicts • Group dynamics and demonstrate skills required for working in groups
	SDC2BF07(p)	Cost Accounting	• Role and concept of cost accounting in the business management of manufacturing and non manufacturing companies. • Understandings about cost, expense, loss and revenue • Preparation of budget in various fields
	SDC2BF07(P)	Cost accounting Lab & Bank test coaching	• Analyze and evaluate information for cost ascertainment ,planning, control and decision making • Developing competencies for competitive examinations
3	GEC3BS08	(BC5B10)Banking Service Management	• Make aware of basic services of banks • Understand procedures of various lending services • Precautions for banker and customers regarding various operations in banks • Know more about procedures of operating various accounts

	SDC3BF09	Marketing management	• Understanding of broad marketing functions in management • Understand fundamental marketing concepts, consumer behavior : product, price, place, distribution
	SDC3BF10	Life insurance operations	• Fundamental understanding about the various principles of life insurance • Knowing various risks associated with life • Procedures and principles of operating various types of policies
	SDC3BF11	Management Accounting, budgeting and forecasting	• Preparation of financial statements And its analysis • Identifying cash and non cash items • Analyzing cost volume profit techniques to determine optimal managerial decisions • Outline and apply various management tools and techniques
	SDC3BF12(P)	Digital Marketing lab-PSC Coaching	• Knowing various marketing techniques through digital medias • Acquiring competitive skills for various examinations
	SDC3BF13(P)	Financial analysis and budget preparation lab	• Acquiring skills of making various financial statements by making use of softwares
4	GEC4ED10	Entrepreneurship development	• Demonstrate an ability to work effectively with others • Ability to engage in critical thinking by analyzing situations and constructing and selecting viable solutions to solve problems • Resources needed for successful development of entrepreneurial ventures.
	SDC4BF14	General Insurance Operations	• Familiarize with various types of general insurance • Procedures involved in operating various types of general insurance policies
	SDC4BF15	Auditing and corporate governance	• External audit of corporate financial statements • Combining theories of auditing with practice • Understanding auditing ethics, audit process, auditors duties, liabilities etc
	SDC4BF16 E2	Risk management and insurance	• Demonstrate knowledge of the range of financial and financial related risks facing organizations • Understanding various risks and how to manage it.

	SDC4BF17(P)	General insurance lab & bank test coaching	• Familiarize with various types of insurance policies • Prepare for competitive examinations
5	GEC5HR11	(BC3C03)Human Resources Management	• Contribute to the development ,implementation and evaluation of employee recruitment ,selection, and retention plans and processes • Develop implement and evaluate employee orientation , training and development programs.
	GEC5AD12	Banking & Microfinance	• Identifying the role of microfinance • Identify reasons for intervening or not intervening in microfinance
	SDC5BF19	Mutual Fund operations	• Understanding the basic concepts of mutual funds • Awareness about types and working of mutual funds • Pricing, selling and investment management techniques and business ethics in mutual funds .
	SDC5BF20	Legal and regulatory aspects of banking	• Attainment of competence in the profession of banking and finance • Practical knowledge regarding the legal aspects of banking
	SDC5BF21	Corporate Accounting	• Ability to account for a range of advanced financial accounting issues • Understanding of advanced issues in accounting for assets, liabilities and owners liability. • Equip students with the preparation of financial accounts of corporate entities
	SDC5BF22	Micro finance operations – Lab and PSC Coaching	• Practical knowledge regarding the operations of micro finance • Preparations for PSC exams
	SDC5BF23	Mutual Funds & online share trading LAB	• Mutual fund operations
6	SDC6BF24(pr)	Internship & project	• Opportunity to experience what students have learned in class and to establish its relevance to the real world.

DEPARTMENT OF B.VOC

Programme Specific Outcomes (PSOs) - B.Voc Agriculture Programme

PSO1	To acquire knowledge on the importance of Environmental Science
PSO2	To acquire knowledge on importance of agriculture and various types of farming.
PSO3	To acquaint with importance, division and classification of horticultural crops and to understand the basic principles and types of plant propagation.
PSO4	To familiarize with fundamentals of water management and to acquaint with various soil conservation methods.
PSO5	To understand the fundamentals of Plant breeding, Basics of Seed technology and cultivation aspects of Plantation crops, spices and fruit crops.
PSO6	To build theoretical foundation in plant tissue culture and biotechnology and to develop knowledge on the theoretical basis of integrated pest management and also to familiarize with protected cultivation structures and cultivation practices.
PSO7	To understand the general characters of weeds and their management and to acquaint with cultivation of rice, fibre crops, fodder crops, etc.
PSO8	To acquire the fundamentals of live stock farming and to understand various aspects of environmental microbiology and biotechnology, to describe various aspects of food and dairy microbiology.
PSO9	To understand various principles and practices of commercial vegetable production and also to have a look on various commercial enterprises in agricultural sector through observation, field visits and presentation and also to familiarize with the concept of sustainability and sustainable development along with organic farming.
PSO10	To acquaint with various Government Policies related to Agriculture in Kerala and India and to familiarise with five year plans and Panchayathiraj system in India.
PSO11	To acquaint with the principles and practices of Human Resource Management, to acquire knowledge of Mathematics and Statistics and to understand the general principles and techniques of Information Technology
PSO12	To develop practical skill in propagation and cultivation aspects of horticultural crops, Plantation crops, spices and fruit crops.
PSO13	To develop skill in various aspects of seed production and to do the micro propagation of plants.
PSO14	To practice with protected cultivation practices of important crops and also the familiarization with cultural methods of pest control.
PSO15	To familiarize with the general characters of weeds and their management, cultivation of rice, fibre crops, fodder crops, familiarization with cultural methods of pest control, familiarize with practices in livestock farming, acquaint with the management of important farm animals and birds.
PSO16	To develop awareness on bee keeping, sericulture and lac culture through observation, field visit and reporting and to develop skill in cultivation of edible mushrooms and to develop skill in dry flower production and bouquet making and also with the production and utilization of biofertilizers and biocontrol agents.

COURSE OUTCOMES

Semester	Course Code	Course Name	Course Outcomes
1	GEC1ES03	Fundamentals of Environmental Science	• CO1-Explain the Methodology and perspectives of science
			• CO2-Explain the definition ,scope and importance of Environmental Science
			• CO3-Describe the components of the environment
			• CO4 -Describe the environment al factors, topographic factors, edaphic factors and biotic factors.
			• CO5 – Describe the ecological adaptations of plants and animals.
			• CO6 –Definition and components of ecosystem.
			• CO7- Explain the energy flow in an ecosystem, Ecological Pyramids and Biogeochemical cycles of an ecosystem.
			• CO8- Describe the Population Ecology and Community Ecology.
	SDC1AG01	Fundamentals of Agronomy	• CO1- Describe the importance of agriculture in India and Kerala
			• CO2-Explain the agricultural classification of crops
			• CO3-Explain the Soil productivity and fertility
			• CO4-Describe the crop nutrition and nutrient cycling through manures and fertilizers.
			• CO5-Explain the Integrated Nutrient Management
			CO6- Explain the irrigation and irrigation methods.
			CO7- Describe the water management.
	SDC1AG02	Fundamentals of Horticulture	• CO1- Describe the definition, importance, division and classification of horticultural crops.

			• CO2- Explain the layout, planting systems and management practices in an orchard.
			• CO3- Describe thetraining and pruning in horticultural crops
			• CO4-Describe the fruit drop and seedlessness in horticultural crops.
			• CO5- Describe the different types of plant propagation methods
			• CO6-Describe the components of nursery and its various aspects.
			• CO7- Explain the plant propagating structures.
	SDC1AG03	Fundamentals of Agricultural Engineering	• CO1- Describe the irrigation with definition and objectives
			• CO2-Explain the methods of irrigation and their engineering aspects
			• CO3- Describe the agronomic techniques to improve water use efficiency
			• CO4-Describe the soil erosion and its relative aspects
			• CO5-Describe the water harvesting techniques - in situ and ex situ methods
			• CO6- Explain surveying: survey equipment, chain survey, cross staff survey, plotting procedure, calculations of area of regular and irregular fields.
	SDC1AG04	Fundamentals of Agronomy and Horticulture – Practicals	• CO1- Identification of cereals and millets, pulses, and tuber crops.
			• CO2. Explain the different methods of sowing; direct seeding: broadcasting, dibbling and drilling-transplantation.

			• CO3. Describe the seed treatment - Rhizobium inoculation of leguminous crops.
			• CO4. Identification of manures and fertilizers and their preparation
			• CO5- Explain the fertilizer recommendation and calculation for major cereals and pulses.
			• CO6. Fertilizer recommendation and calculation for major cereals and pulses
			• CO7-Familiarization with green manure crops and cover crops, Different planting systems and layout and the propagation methods
	GEC2HR06	Human Resource Management	• CO1- Explain the scope and objectives of HRM.
			• CO2- Describe the approaches to HRM
			• CO3- Explain the Human resource planning
			• CO4- Describe the process of job analysis
			• CO5- Describe the recruitment and methods.
			• CO6- Explain the areas of training and training environment.
			• CO7- Explain the concept of career planning
			• CO8-Describe the compensation management and grievance redressal
	SDC2AG05	Plantation Crops, Spices and Fruits	• CO1- Explain the importance - area, production ,origin, distribution of plantation crops.
			• CO2- Describe the propagation, planting, irrigation ,and manuring of Coconut and Rubber.
			• CO3- Explain the nursery management -,layout, planting, aftercare ,irrigation, manuring and stage of harvest, harvesting, yield and uses of cashew, tea and coffee.

			• CO4-Describe the distribution, propagation,crop management of pepper, cardamom,ginger and nutmeg
			• CO5- Describe the importance and scope of commercial fruit production
			• CO6- Explain the maturity indices, harvesting, grading, packing, storage and ripening techniques and also the industrial and export potential- of Crops Banana, mango, and pineapple.
			• CO7 – Describe the management practices of crops -
	SDC2AG06	Fundamentals of Seed Technology	• CO1- Describe the morphology and systematics of crop plants
			• CO2-Explain the basics of seed production
			• CO3-Describe the Genetic and agronomic principles of seed production and Seed testing procedures for quality assessment
			• CO4- Describe the role of growth regulators in restoring seed viability
			• CO5- Explain the general principles of seed storage, measures for pest and disease control, temperature control
			• CO6-Legislation of Seed Technology
			• CO7- Explain the government policy in seed production and study of export potential of seeds.
	SDC2AG07	Plantation Crops, Spices and Fruits and Seed Technology-Practicals	• CO1- Describe the Nursery techniques, Seedling selection, Production of quality planting materials and hybrids and mother palm selection of coconut
			• CO2 - Explain the layout and planting, care and management of plantations
			• CO3- Describe the practice in propagation, selection of good planting materials, field preparation and planting, manuring and use of growth regulators
			• CO4 – Describe the general morphology of roots, stem , leaves,

			inflorescence, flowers and family characters and botany and economic parts of the crop plants
			• CO5- Explain the preparation and use of fixatives and stains for light microscopy
			• CO6- Describe the preparation of micro slides
			• CO7 – Explain the Seed sampling principles and procedures
			• CO8- Explain Seed Testing: Germination analysis and viability analysis of seeds and Seed dormancy and breaking methods
Semester 3	GEC3NS08	Basic Numerical Skills	• CO1- Explain the Sets and Set Operation
			• CO2- Explain the matrix multiplication
			• CO3- Describe the theory of equations
			• CO4- Explain the meaning and definition of Statistics along with its scope and limitations
			• CO5- Describe the presentation of data by Diagrammatic and Graphical Method and the formation of Frequency Distribution.
			• CO6- Describe the measures of central tendency
	GEC3TC09	Plant Tissue Culture and Biotechnology	• CO1- Describe the principles and techniques of plant tissue culture
			• CO2- Explain the Tissue culture medium
			• CO3- Describe the preparation of explants and different methods of micropropagation
			• CO4- Explain the different phases of micropropagation
			• CO5- Explain the methods and applications of tissue culture
			• CO6- Describe the recombinant DNA Technology
			• CO7- Explain the cloning vectors and PCR
			• CO8- Describe the different methods of gene transfer
			• CO9- Explain the application of biotechnology

	SDC3AG09	Micropropagation of Plants- Practicals	• CO1-Explain the requirements for Plant Tissue Culture laboratory and media components and preparations.
			• CO2- Describe the preparation and sterilization of media and aseptic manipulation and inoculation of various explants
			• CO3- Explain the micro propagation of important crops
			• CO4- Descibe the preparation of synthetic seeds
			• CO5- Explain the demonstraion of anther culture and embryo culture.
	SDC3AG10	Integrated Pest Management in Crops	• CO1- Describe the concepts, principles and tools of IPM
			• CO2- Explain the different types of IPM Methods
			• CO3- Describe the important groups of micro organisms used in insect pest control.
			• CO4- Explain the mass multiplication techniques of important biocontrol agents
			• CO5- Describe the classification of insecticides based on chemical nature
			• CO6- Describe the formulations of insecticides and calculation of quantity of formulations for field application
			• CO7- Describe the distribution, host-range, symptoms of damage and management practices for major pests of the following crops-Rice, Coconut, Banana, Cashew, Pepper, cardamom, Brinjal, Bittergourd and cowpea.
	SDC3AG11	Protected Cultivation of Horticultural Crops	• CO1- Describe the introduction, scope and important of problems and prospects of protected culture in India
			• CO2- Explain the basic considerations in establishment and operation of greenhouses
			• CO3- Explain the environmental control systems in green house.
			• CO4- Describe the type of containers used in protected culture

			• CO5- Explain the use of substrate and preparation of substrate for protected cultivation
			• CO6- Describe the Crop regulation
			• CO7- Explain the harvesting methods
	SDC3AG12	Protected Cultivation of Horticulture crops and Pest Management - Practicals	• CO1-nExplain the design and orientation of poly/green houses and study of various inputs used for protected culture
			• CO2- Describe the use of substrate and preparation of substrate for protected cultivation
			• CO3-Explain the special horticultural practices in protected cultivation
			• CO4-Explain the protected cultivation aspects of individual crops
			• CO5- Explain the identification of predators and microbial agents.
			• CO6- Identification, symptoms of damage, collection and preservation of pests of: a) Rice, Coconut. b) Banana, Cashew c) Pepper, cardamom d) Brinjal, Bittergourd and cowpea.
Semester 4	GEC4IT11	Information Technology	• CO1-Describe the nature, importance and applications in business and management office automation
			• CO2-Ex plain Microsoft Office
			• CO3- Describe the Database system
			• CO4- Explain the Internet protocol suite
			• CO5-Explain the objectives and advantages of EDI
	SDC3AG13	Weed Management and Crop Production	• CO1-Explain the classification, propagation and dissemination of weeds
			• CO2- Describe the Integrated weed management
			• CO3-Describe the herbicide classification, formulations, methods of application.
			• CO4- Describe the soil and climatic requirement , varieties, cultural practices , harvesting and

			postharvest handling of major Oilseeds
\			• CO5- Explain the Crop Production in rice
			• CO6-Describe the mechanised farming in rice
			• CO7-Describe the cultivation and management of fodder crops
	SDC3AG14	Livestock Farming	• CO1- Describe the role of Livestock in National economy
			• CO2-Describe the general management Practices in Dairy farming
			• CO3-Describe the cattle and buffalo management
			• CO4-Explain the general management practices
			• CO5-Explain the dairy development in India-
			• CO6- Describe the composition of milk, Constituent of Milk, Factors affecting Quality and Quantity of milk, Nutritive value , and Physico-chemical properties of milk
			• CO7-Describe the poultry management
			• CO8-Detailed study of major animal diseases
	SDC3AG15	Weed Management, Crop Production and Livestock Farming - Practicals	• CO1- Describe the practices in livestock farming
			• CO2- Explain the techniques of weed collection, identification and preparation of herbarium of weeds.
			• CO3- Describe the economics of weed control.
			• CO4- Explain the mechanical methods of pest control
			• CO5- Identification of predators and microbial agents
			• CO6- Describe the identification,symptoms of damage, collection and preservation of pests of: a) Rice, Coconut. b) Banana, Cashew. c) Pepper, cardamom. d) Brinjal, Bittergourd and cowpea

			• CO7-Describe the morphology of cattle, buffalo and poultry and classification of Cattle Breeds
			CO8- Study of Cattle, Buffalo, Goat and Sheep Breeds
Semester 5	GEC5EM13	Environmental Microbiology and Biotechnology	• CO1- Describe the structure, biology and classification and identification of microorganisms.
			• CO2- Explain tools in Microbiology
			• CO3-Describe the preparation of samples, types of media-sterilization techniques
			• CO4-Explain the methods of estimation and isolation of microorganism in soil, water and milk
			• CO5-Describe the role of soil microorganisms
			• CO6-Explain the distribution, techniques and role of air microorganisms
			• CO7-Explain the microbial genetics
			• CO8- Describe the microbial growth process and major products of Industrial microbiology
			• CO9- Explain the Environmental Applications
	GEC5FD14	Food and Dairy Microbiology	• CO1-Describe the types of microorganisms in food
			• CO2-Explain the factors influencing microbial growth in foods
			• CO3-Describe the types of microorganisms in Milk- bacteria, fungi and yeast
			• CO4- Explain the microbiological analysis of milk
			• CO5-Describe the food fermentation process
			• CO6- Explain the different kinds of foods, cereals and cereal products
			• CO7-Explain the food borne infections
			• CO8- Describe the principles and methods of food preservation
	SDC3AG17	Commercial Vegetable Production	CO1- Describe the importance and scope of vegetable crops of India with special emphasis to Kerala.
			CO2- Explain the classification of

			vegetables
			• CO3- Explain the factors affecting and basic principles of vegetable production.
			• CO4- Describe the types of vegetable garden for seed production
			• CO5- Explain the production technology of warm season vegetable
			• CO6- Describe the production Technology of cool season vegetables
	SDC3AG18	Agricultural Enterprises	• CO1- Describe the kinds of bees, biology,hiving and domestication along with seasonal management of bees
			• CO2- Describe the types of silkworms in morphology, biology, rearing of silkworms in India
			• CO3- Describe the diseases and enemies of silkworm and their control
			• CO4- Explain the use of biotechnology in sericulture
			• CO5- Describe and detailed study on mushroom cultivation
			• CO6- Describe the commercial floriculture, Status and prospects of commercial cultivation of flowers
	SDC3AG19	Fundamentals of Organic Farming	• CO1- Explain the concept of Sustainable agriculture and study the differences between conventional, sustainable, and alternate agriculture
			• CO2- Explain Indian agriculture in terms of availability of natural resources and their carrying capacity
			• CO3- Describe the crop production practices and animal production practices
			• CO4- Describe Principles of organic farming and food security
			• CO5- Explain the different traps and pheromones for pest control
			• CO6- Describe the National Programme for Organic Production (NPOP)
			• CO7- Explain the organic farming initiatives in India and Kerala

	SDC3AG20	Government Policies and Programmes Related to Agriculture	• CO1-Explain the agricultural policies of Kerala and of India
			• CO2- Describe the agricultural policies regarding land and labour
			• CO3- Explain the agricultural policies regarding seeds and fertilizers
			• CO4- Explain the agricultural policies regarding credit
			• CO5- Describe the Five Year plans and Panchayathiraj
	SDC3AG21	Commercial Vegetable Production, Agricultural Enterprises and Organic Farming -Practicals	• CO1- Explain the different aspects of Commercial vegetable production
			• CO2- Explain the handling of bee colonies and extraction and processing of honey.
			• CO3-Describe and study the aspects of mushroom cultivation
			• CO4-Explain and study the production techniques of dry flowers.
			• CO5- Explain the preparation of Vermicompost
			• CO6- Explain and study the different aspects of organic farming.

DEPARTMENT OF HINDI

Programme specific Outcomes BA/BSc Programme Common Course in Hindi

HIN1A07	To acquaint the students with different forms, thoughts and styles used in Hindi Drama through the ages; To make them able to critically evaluate the dramas prescribed and use this knowledge while dealing with other dramatic works in Hindi; to make them get a glimpse of the present scenario in respect of Hindi Theatre; to help them develop their creative thinking and writing.
HIN2A08	To make the student well versed in Hindi so that he can speak Hindi fluently and use Hindi as a medium of communication in the fields of Commerce, administration and thus to develop communicative and technical skills in Applied Hindi.
HIN3A09	To acquaint students with the thoughts, ideas and ideologies of ancient and modern Hindi Poets. To encourage them to read more Hindi poetry and to help the students to develop their creative capability.
HIN4A10	To acquaint the students with different forms, thoughts and styles used in Hindi Novels; To make them able to critically evaluate the novels prescribed and use this knowledge while dealing with other novels and short stories in Hindi , to help them develop their creative thinking and writing.

Course Outcomes BA/BSc Programme Common Course in Hindi

Semester	Course code	Course name	Course outcomes
I semester	HIN1A07	Prose & Drama	• Approach literary texts in terms of genre, gender and the canon.
			• Understand and use academic conventions: referencing and bibliography.
			• Exposed to the origin and development of Hindi drama and its various themes and forms of different ages and stages.
			• Helps students explore how writers use the resources language as a creativity to explore the entire range of human experience through dramas as a literary form.
II	HIN2A08	Grammar & Translation	• Understand the differences between spoken and written Hindi.

			• Understand the factors that influence use of grammar and vocabulary in speech and writing.
			• Understand the different ways in which grammar has been described.
			• Define the link between translation theory and translation practice.
			• Define the effects of translation theories on translation practice.
			• Define the contribution of translation practice to translation theory.
III	HIN3A09	Poetry in Hindi	• Understand the common techniques underlying free verse and traditional forms of poetry.
			• Identify personal experiences that can be used when writing poems.
			• Understand the basic terminology and practical elements of poetry.
IV	HIN4A10	Novel & Short Stories	• Enables the students to analyze literature and fiction using appropriate theoretical, historical, and cultural apparatus.
			• Students get to know various cultures and construction of gender, nation and race throughout the history.
			• The prescribed fiction helps the students to learn human values and the behavioural patterns from great works of art, and develops the ability to understand human race.

Programme specific Outcomes B Com/BBA Common Course in Hindi

HINA07(2)	To inculcate an appreciation of literature in students using the best specimens provided as a reading list or anthology and by practicing literary analysis and literary criticism using the best specimens. Thus, understanding Literary works as cultural and communicative events-different periods, genres and movements.
HINA08(2)	A student who successfully completes the course should be able to prepare all kinds of letters independently as required in their personal, professional and social life. Also to make the students familiarize with the correspondence and to enhance the capability of comprehending data and relevance documents.

Course Outcomes B Com/BBA Common Course in Hindi

Semester	Course Code	Course Name	Course Outcomes
I Semester	HINA07(2)	Prose Forms In Hindi Literature	• Approach literary texts in terms of genre, gender and the canon.
			• Understand and use academic conventions: referencing and bibliography.
			• The learner will be aware of socio-political and economic conditions of the society from different periods.
II Semester	HIN08(2)	Poetry , Correspondance And Translations	• Understand the common techniques underlying free verse and traditional forms of poetry.
			• Identify personal experiences that can be used when writing poem.
			• Understand the basic terminology and practical elements of poetry.
			• Define the link between translation theory and translation practice.
			• Define the effects of translation theories on translation practice.
			• Define the contribution of translation practice to translation theory.
			• Understand the importance of correspondence.

Programme specific Outcomes Other Pattern Common Course in Hindi

HINA07(3)	Familiarize the students with some of the eminent writers in rose literature and thereby inculcate Socio-cultural values. And also to develop communicative and technical skills in Applied Hindi.
HINA08(3)	To acquaint the students with different forms, thoughts and styles used in Hindi poetry and drama through the ages; To make them able to critically evaluate the poetic and dramatic works prescribed and use this knowledge while dealing with other works in Hindi; to help them develop their creative thinking and writing

Course Outcomes Other Pattern Common Course in Hindi

Semester	Course Code	Course Name	Course Outcomes
I Semester	HINA07(3)	Prose And Oneact Plays	• Approach literary texts in terms of genre, gender and the canon. Understand and use academic conventions: referencing and bibliography. • The learner will be aware of socio-political and economic conditions of the society from different periods. Be familiar with the theoretical foundations of the genre. • Be able to compare and contrast the genre with other dramatic forms.
II Semester	HIN08(3)	Poetry And Short Stories	• Understand the common techniques underlying free verse and traditional forms of poetry • Identify personal experiences that can be used when writing poems. • Understand the basic terminology and practical elements of poetry. • Students get to know various cultures and construction of gender, nation and race throughout the history. The prescribed fiction helps the students to learn human values and the behavioral patterns from great works of art, and develops the ability to understand human race.

DEPARTMENT OF MALAYALAM

Programmespecific Outcomes (PSOs) –common course for BA/B. Sc/Bcom/BBA/Bvoc Programm

	Programme specific outcomes
PSO1	To give an authentic knowledge about the chronological developments of Malayalam language and literature
PSO2	To familiarize the students with the different genres of literature and our variety artforms .
PSO3	To increase the creative and communicative skills of students.
PSO4	To discuss about the recent trends in Malayalam language and literature and its practical aspects in current situations.
PSO5	To enable them to make multidisciplinary approaches towards other disciplines
PSO6	To understand the various
PSO7	To welcome them in the world of Translation works and its wide cultural and linguistic importance.
PSO8	To enable them for analysing the recent social,cultural,environmental issues and response to it.
PSO9	To know the basic grammatical concepts of Malayalam language
PSO10	To know about the vocabulary of administrative language and its use.

Course Outcomes

Semester	Course Code	Course Name	Course outcomes
I BA/ BSc	MAL1A07(1)	Malayala sahithyam-1	• CO1-To give general awareness about ancient Malayalam poetry and its genres.
			• CO2-To understand the oral traditions and its variety streams.
			• CO3-To develope a clear concept about Malayalam short-story and its developments.
			• CO4- Provide opportunities to them to read different types of fiction. • CO5-Tofamiliarize the students with different perceptive of short-story writers and approach in a critical way.
			• CO6-To analyse the idea -Classicism
			• CO7-To introduce different artforms of Kerala and understand basic
II BA/BSc	MAL2A08(1)	Malayala sahithyam -2	• CO1- To understand the aesthetic concept of modern poetry.
			• CO2- To know about the eminent poets in modern Malayalam poetry.
			• CO3-To introduce the ideas of romanticism, Realism,modernism and post-modernism

			• CO4-To give clear views about Malayalam critiicism and it's diffetent ways.
			• CO5-To capable a student to approach a creative work in a critical way
III BA/BSc	MAL3A09	Malayala sahithyam -3	• CO1-To know about general concepts about Malayalam drama and it's importance in literature.
			• CO2-To recognise drama as a literierical form and also as a theatre art.
			• CO3-To provide the basic concepts of film making and give information's about it stachnicalsides.To appreciate the beauty of Malayalam films and realize it with its powerful screenplay.
			• CO4-Toprovide general idea about biography and auto-biography literature in Malayalam.
			• CO5-To know about the cultural and geographical importance of travalogues and its literierical value.
IV BA/BSc	MAL4A10	Malayala Sahithyam-4.	• CO1-To give general awareness about the socio-cultural aspects of dialects. • CO2-Toanalysethepostmodernnovelconcepts. • CO3-To realize translations as animportant tool for cultural and informational changes
			• CO4-To give directions to understand the theoretical ides of translation and enable them for simple translations.
			• CO5-To analyse the historical and cultural components which includes in Malayalam prose through the study of the given texts.
I sem Bcom / BBA	MAL1A07(2)	Malayala Sahithya padanam-1	• CO1-To analyse the application level and it's distinctiveness of language in scientific articles. • CO2-To analyse the narrative styles and perspectives of Eminent Novelists and storywriters
			• CO3-To realise the fictional beauty of Malayalam shortstories
			• CO4-To understand the creative beauty of Malayalam novels.
			• CO5-To make use of travalogues for analyse the difference between many places.
II sem Bcom / BBA	MAL2A08(2)	Malayala sahithya Padanam-2	• CO1-To provide the knowledge about the evolution of Malayalam poetry in different time.
			• CO2-To know about the general concepts about

			Malayalam shortstory
			• CO3-To recognize drama as a literary work and also a performing art.
			• CO4-To give opportunities to students for crative performances.
			• CO5-To read biography and autobiography of famous personalities and get inspiredby it's valuable messages
I sem BCA / Bvoc (Other pattern)	MAL2A07(3)	Malayalam - Bhashayum sahithyavum-1	• CO1-To give general awareness about Malayalam shortstory and its specialities.
			• CO2-To familiarize different styles of prose and the importance of the views of the Writers.
			• CO3-To enjoy and analyse the modern Malayalam poems and prepare them for creative writing and thinking
			• CO4-To realize travalogues as an important ways to understand different cultures and languages.
			• CO5-To provide opportunity to familiarize with travalogues and read it is in an interesting way.
			• CO6-To find values which direct our life in a goodway.
II sem BCA / Bvoc (other pattern)	MAL202(2)	Malayalam Bhashayum Sahithyavum-2	• CO1-To give general awareness about Malayalam short story and its specialities.
			• CO2-To give directions to science students how to analyse a autobiography for a better reading and good thinking.
			• CO3-To provide opportunity to appreciate Malayalam novels which represents different narrative styles and themes.
			• CO4-To understand the factors which accelerate the major changes happened in the history of Malayalam drama.
			• CO5-To analyse the art of Malayalam drama and its importance in emerging Kerala culture