PROGRAM OUTCOME, COURSE OUTCOME

AND PROGRAM SPECIFIC OUTCOME

(For All Subjects)

1. B.A., ECONOMICS

Programme Outcomes

PO1:	**Knowledge of Economics:** Ability to understand Economic Theories and functioning of Economic Models. To develop an adequate competency in the Economic Theory and Methods.
PO2:	**Analytical Reasoning and Critical Thinking:** Critically analyze and assess the way in which economists examine the real world to understand the current events and evaluate specific proposals.
PO3:	**Logical Reasoning and Quantitative Ability:** Ability to understand how to collect and analyse data and use empirical evidence to evaluate the validity of hypothesis, using Quantitative Methodology and conduct data analysis to interpret results.
PO4:	**Communication and Research Skills:** Developing a sense of capability for relevant/appropriate inquiry and asking questions, synthesizing and articulating and reporting results and to efficiently communicate thoughts and ideas in a clear and concise manner.
PO5:	**Gender, Environment and Sustainability:** Comprehend the Environmental issues and Sustainable Development and strive to achieve economic and social equity for women and be Gender Sensitive.
PO6:	**Employability and Leadership Skills:** Become empowered individuals to be employed in various positions in industry, academia and research and have the potential to become Entrepreneurs and take leadership roles in their chosen occupations and communities.
PO7:	**Social Interaction:** Acquire the ability to engage in relevant conversations and have the ability to understand the views of society that would help initiate policy making.
PO8:	**Digital Literacy and Lifelong Learning:** Capability to use ICT tools in a variety of learning situation and use appropriate software for analysis of data - Ability to acquire Knowledge situations and skills for life through self directed learning and adapt to different learning environments.

Programme Specific Outcomes:

PSO1	To enable students to apply basic microeconomic, macroeconomic and monetary concepts and theories in real life and decision making.
PSO2	To sensitize students to various economic issues related to Development, Growth, International Economics, Sustainable Development and Environment.
PSO3	To familiarize students to the concepts and theories related to Finance, Investments and Modern Marketing.
PSO4	Evaluate various social and economic problems in the society and develop answer to the problems as global citizens.
PSO5	Enhance skills of analytical and critical thinking to analyze effectiveness of economic policies.

MICRO ECONOMICS-I

COs	On completion of this course, students will	POs
CO1	Understand the meaning of basic concepts and the need for the study of Microeconomics.	PO1,PO2
CO2	Evaluate the Types of Utility and Consumer behavior	PO2,PO3
CO3	Acquire knowledge on various market equilibrium, Demand and Supply Functions	PO1,PO2
CO4	To understand the meaning of Production Functions	PO1
CO5	To understand the theory of firms, Cost and Revenue	PO1

STATISTICS FOR ECONOMICS –I

COs	On completion of this course, students will	POs
CO1	Understand the overview of statistics and basic knowledge of statistical tools	PO1, PO3,PO8
CO2	Differentiate Types of Data and its Classification	PO1,PO2, PO3,PO8
CO3	Explain the concept of Averages and its application	PO1, PO2,PO3
CO4	Know the concept of Dispersion and its application	PO1, PO2,PO3
CO5	Calculate Correlation and estimate values using Regression	PO3,PO7,PO8

FUNDAMENTALS OF MANAGEMENT

COs	On completion of this course, students will	POs
CO1	Understand the foundations and importance of Management	PO1
CO2	Demonstrate an understanding of Planning	PO2,PO3
CO3	Analyze the organisational levels and Process of selection	PO1, PO2,PO3
CO4	Discuss the relevance of Organizational Culture	PO1,PO2,
CO5	Examine the importance of quality control	PO4

INTRODUCTION TO SOCIOLOGY

COs	On completion of this course, students will	POs
CO1	Understand the contributions of sociologists in the field of sociology	PO1,PO2
CO2	Understand the basic aspects of Sociology	PO1,PO2
CO3	Examine the impact of individuals, groups and society	PO1, PO5,PO7
CO4	Understand the dimensions of social stratification	PO2,PO7
CO5	Analyze and design Policy for social change	PO2,PO3,PO7

DEMOGRAPHY

COs	On completion of this course, students will	POs
CO1	Describe the various theories of Population Growth	PO1, PO7
CO2	Understand Demographic Indicators	PO2, PO3
CO3	Assess the causes and impact of Migration on rural-urban population distribution	PO2,PO7
CO4	Analyse the major demographic trends and their determinants	PO1,PO2
CO5	Evaluate Population Policy of India and analyse recent trends.	PO1,PO2,PO3

BUSINESS COMMUNICATION

COs	On completion of this course, students will	POs
CO1	Understand the basics of communication and its Process, Elements, and its importance	PO1,PO2
CO2	Acquire communication skills.	Acquire communication skills.
CO3	Apply the art of writing Business Letters	PO2,PO6
CO4	Use appropriate technology for business presentations and digital communication and write E-mails in a structured pattern.	PO5,PO6, PO8
CO5	Employ the art of report preparation	PO4,PO6,PO7

MICROECONOMICS-II

COs	On completion of this course, students will	POs
CO1	Understand the equilibrium conditions in Perfect Competition	PO1, PO2
CO2	Analyze the equilibrium conditions under Monopoly Market Structure.	PO1,PO2
CO3	Describe the Market Equilibrium under Monopolistic and Oligopoly Market.	PO1,PO2
CO4	Know the importance of theories of Distribution	PO1,PO2
CO5	Evaluate the aspects of Welfare Economics and General Equilibrium.	PO2,PO3,PO7

STATISTICS FOR ECONOMICS-II

COs	On completion of this course, students will	POs
CO1	Gain Knowledge on the Index Numbers	PO1, PO2,PO3
CO2	Analyze the importance of Time Series Data and its measurement	PO1,PO2,PO3
CO3	Understand the concept of Probability	PO2
CO4	Identify the various Sampling Methods	PO1, PO2
CO5	Acquire Knowledge on Hypothesis Testing	PO2,PO3,PO7,PO8

HISTORY OF ECONOMIC THOUGHT

COs	On completion of this course, students will	POs
CO1	Acquire knowledge on the subject matter of History of Economic Thought.	PO1
CO2	Understand the contributions of the Classical Ideas of Economics	PO1,PO2
CO3	Describe Neo Classical and Institutional Economic Ideas	PO1,PO2
CO4	Examine the Keynesian School and Modern Economic Ideas	PO1,PO2
CO5	Understand the contribution of Nobel Laureates and Indian Economic Ideas	PO1,PO2,PO8

INTRODUCTION TO E-COMMERCE

COs	On completion of this course, students will	POs
CO1	Understand the pros & cons of E-commerce	PO1,PO2
CO2	Analyze the various models of E-commerce.	PO1,PO2
CO3	Understand the online business transaction and their impact on related service providers.	PO2,PO3
CO4	Understand the e-marketing mix and be familiar with consumer protection.	PO3.PO4
CO5	Know the mechanism of E- payment and its operations.	PO2,PO3, PO8

ECONOMICS FOR INVESTORS

COs	On completion of this course, students will	POs
CO1	Describe the types and importance of savings and investments.	PO1
CO2	Explain the available investment avenues	PO2
CO3	Understand the operations of different types of investment markets.	PO1,PO2
CO4	Evaluate the economic fundamentals and information.	PO1,PO3
CO5	Construct objective enabling investment plans, strategy, evaluate and restructure if required	PO2,PO3,PO4

COMPUTER APPLICATIONS IN ECONOMICS

COs	On completion of this course, students will	POs
CO1	Understand basic components of Computer and its functions.	PO1, PO3,PO8
CO2	Gain Knowledge of MS Office.	PO3,PO8
CO3	Outline data processing techniques of MS Excel	PO2,PO3,PO8
CO4	Understand basic Operation in MS Excel.	PO1,PO2,PO8
CO5	Apply MS Excel in Statistics and Economics	PO2,PO3,PO8

2. B.A. ENGLISH

Programme Outcomes:

PO1:	**Disciplinary Knowledge:** Capable of demonstrating comprehensive knowledge and understanding of one or more disciplines that form a part of an undergraduate programme of study.
PO2:	**Critical Thinking:** Capability to apply analytic thought to a body of knowledge; analyse and evaluate evidence, arguments, claims, beliefs on the basis of empirical evidence; identify relevant assumptions or implications; formulate coherent arguments; critically evaluate practices, policies and theories by following scientific approach to knowledge development.
PO3:	**Problem Solving:** Capacity to extrapolate from what one has learned and apply their competencies to solve different kinds of non-familiar problems, rather than replicate curriculum content knowledge; and apply one‟s earning to real life situations.
PO4:	**Analytical Reasoning:** Ability to evaluate the reliability and relevance of evidence; identify logical flaws and holes in the arguments of others; analyze and synthesize data from a variety of sources; draw valid conclusions and support them with evidence and examples and addressing opposing viewpoints.
PO5:	**Scientific Reasoning:** Ability to analyse, interpret and draw conclusions from quantitative/qualitative data; and critically evaluate ideas, evidence, and experiences from an open minded and reasoned perspective.
PO6:	**Self-directed & Lifelong Learning:** Ability to work independently, identify and manage a project. Ability to acquire knowledge and skills, including “learning how to learn”, through self-placed and self-directed learning aimed at personal development, meeting economic, social and cultural objectives.
PO7:	**Reflective Thing:** Critical sensibility to lived experiences, with self awareness and reflexivity of both self and society
PO8:	**Reading & Projects:** Document their reading and interpretive practices in assignments, translation works, and independent projects.
PO9:	**Confidence & Effectiveness:** Confidently and effectively articulate their literary and textual experiences.
PO10	**Social Skills & Empathetic Approach:** Reorganize a professional and reflective approach to leadership, responsibility, personal integrity, empathy, care and respect for others, account ability and self regulation.

Programme Specific Outcomes:

PSO1:	Acquire good knowledge and understanding, to solve specific theoretical & applied problems in different area of English Language and Literature.
PSO2:	Explore the avenues of World Literatures.
PSO3:	To prepare the students who will demonstrate respectful engagement with others ideas, behaviors, beliefs and apply diverse frames of references to decisions and actions. To create effective entrepreneurs by enhancing their critical thinking, problem solving, decision making and leadership skill that will facilitate startups and high potential organizations.
PSO4:	Developing a research framework and presenting their independent ideas effectively.
PSO5:	Equipping their employability skills to excel in professions like teaching and exposing them to various activities to empower them through communication skills.
PSO6:	Enabling a holistic perspective towards the socio-political inequalities and environmental issues.

Course Outcomes

COs	On completion of this course, students will;	POs
CO1	Appreciate the historical trajectory of various genres of Indian Writing in English from colonial times to till the present	PO1
CO2	Analyze Indian literary texts written in English in terms of colonialism, postcolonialism, regionalism, and nationalism	PO1, PO2
CO3	Explore the role of English as a medium for political awakening and the use of English in India for creative writing	PO4, PO6
CO4	Analyze how the sociological, historical, cultural and political context impacted the texts selected for study	PO4, PO5, PO6
CO5	Evaluate critically the contributions of major Indian English poets and dramatists	PO3, PO8

ELECTIVE

COs	On completion of this course, students will;	POs
CO1	Gain knowledge of various features of social and political history of England	PO1
CO2	Awareness of the relation between socio- religious events and socio- political works	PO1, PO2
CO3	Compare history with Literature	PO4, PO6
CO4	Enable to assess the emergence, reasons, development and the impact of social movements	PO4, PO5, PO6
CO5	Assess the overall emergence of English society as a nation.	PO3, PO8

SKILL ENHANCEMENT COURSE

COs	On completion of this course, students will;	POs
CO1	Identify the basic principles of communication	PO1
CO2	Analyze the various types of communication	PO1, PO2
CO3	Make use of the essential principles of communication	PO4, PO6
CO4	Identify the prominent methods and models of Communication	PO4, PO5, PO6
CO5	Learn about the four skills of language and get familiarized with them	PO3, PO8

FOUNDATION COURSE

COs	On completion of this course, students will;	POs
CO1	Recall the fundamentals of English Grammar	PO1
CO2	Understand the formal and informal usages to obtain proficiency	PO1, PO2
CO3	Analyze Sentence structure, synthesis and usages	PO4, PO6
CO4	Recognize and use of Auxiliary and module verbs in writing and speaking	PO4, PO5, PO6
CO5	Evaluate the Patterns of expression, basic structure and sentence pattern	PO3, PO8

3. BBA (BUSINESS ADMINSTRATION)

PO1	**Disciplinary knowledge:** Capable of demonstrating comprehensive knowledge and understanding of one or more disciplines that form a part of an undergraduate Programme of study
PO2	**Communication Skills:** Ability to express thoughts and ideas effectively in writing and orally; Communicate with others using appropriate media; confidently share one's views and express herself/himself; demonstrate the ability to listen carefully, read and write analytically, and present
PO3	**Critical thinking:** Capability to apply analytic thought to a body of knowledge; analyse and evaluate evidence, arguments, claims, beliefs on the basis of empirical evidence; identify relevant assumptions or implications; formulate coherent arguments; critically evaluate practices, policies and theories by following scientific approach to knowledge development. complex information in a clear and concise manner to different groups
PO4	**Problem solving:** Capacity to extrapolate from what one has learned and apply their competencies to solve different kinds of non-familiar problems, rather than replicate curriculum content knowledge; and apply one's learning to real life situations
PO5	**Analytical reasoning:** Ability to evaluate the reliability and relevance of evidence; identify logical flaws and holes in the arguments of others; analyze and synthesize data from a variety of sources; draw valid conclusions and support them with evidence and examples, and addressing opposing viewpoints.
PO6	**Research-related skills:** A sense of inquiry and capability for asking relevant/appropriate questions, problem arising, synthesising and articulating; Ability to recognise cause-and-effect relationships, define problems, formulate hypotheses, test hypotheses, analyse, interpret and draw conclusions from data, establish hypotheses, predict cause-and-effect relationships; ability to plan, execute and report the results of an experiment or investigation.
PO7	**Cooperation/Team work:** Ability to work effectively and respectfully with diverse teams; facilitate cooperative or coordinated effort on the part of a group, and act together as a group or a team in the interests of a common cause and work efficiently as a member of a team
PO8	**Scientific reasoning:** Ability to analyse, interpret and draw conclusions from quantitative/qualitative data; and critically evaluate ideas, evidence and experiences from an open-minded and reasoned

	perspective.
PO9	**Reflective thinking:** Critical sensibility to lived experiences, with self awareness and reflexivity of both self and society.
PO10	**Information/digital literacy:** Capability to use ICT in a variety of learning situations, demonstrate ability to access, evaluate, and use a variety of relevant information sources; and use appropriate software for analysis of data
PO11	**Self-directed learning:** Ability to work independently, identify appropriate resources required for a project, and manage a project through to completion
PO12	**Multicultural competence:** Possess knowledge of the values and beliefs of multiple cultures and a global perspective; and capability to effectively engage in a multicultural society and interact respectfull with diverse groups.
PO13	**Moral and ethical awareness/reasoning:** Ability to embrace moral/ethical values in conducting one's life, formulate a position/argument about an ethical issue from multiple perspectives, and use ethical practices in all work. Capable of demon starting the ability to identify ethical issues related to one‟s work, avoid unethical behaviour such as fabrication, falsification or misrepresentation of data or committing plagiarism, not adhering to intellectual property rights; appreciating environmental and sustainability issues; and adopting objective, unbiased and truthful actions in all aspects of work.
PO14	**Leadership readiness/qualities:** Capability for mapping out the tasks of a team or an organization, and setting direction, formulating an inspiring vision, building a team who can help achieve the vision, motivating and inspiring team members to engage with that vision, and using management skills to guide people to the right destination, in a smooth and efficient way.
PO15	**Lifelong learning:** Ability to acquire knowledge and skills, including "learning how to learn',that are necessary for participating in learning activities throughout life, through selfpaced and self-directed learning aimed at personal development, meeting economic, social and cultural objectives, and adapting to changing trades and demands of work place through knowledge/skill development/reskilling.

Program Specific Outcomes:

PSO1:	To enable students to apply basic microeconomic, macroeconomic and monetary concepts and theories in real life and decision making.
PSO 2:	To sensitize students to various economic issues related to Development, Growth, International Economics, Sustainable Development and Environment.
PSO 3:	To familiarize students to the concepts and theories related to Finance, Investments and Modern Marketing.
PSO 4:	Evaluate various social and economic problems in the society and develop answer to the problems as global citizens.
PSO 5:	Enhance skills of analytical and critical thinking to analyze effectiveness of economic policies.

PRINCIPLES OF MANAGEMENT

COs	On completion of this course, students will;	POs
CO1	Describe nature, scope, role, levels, functions and approaches of management	PO5
CO2	Apply planning and decision making in management	PO2, PO5, PO6,PO8
CO3	Identify organization structure and various organizing techniques	P01, PO4 CO4
CO4	Understand Direction, Co-ordination & Control mechanisms	PO2,PO6
CO5	Relate and infer ethical practices of organisation.	PO3, PO8

ACCOUNTING FOR MANAGEMENT I

COs	On completion of this course, students will;	POs
CO1	Prepare Journal, ledger, trial balance and cash book	PO2, PO1
CO2	Classify errors and making rectification	PO1
CO3	Prepare final accounts with adjustments	PO2, PO6
CO4	To understand Hire Purchase system	PO2, PO6
CO5	Prepare single and double entry system of accounting.	PO6

MANAGERIAL ECONOMICS

COs	On completion of this course, students will;	POs
CO1	Analyze & apply the various managerial economic concepts in individual & business decisions.	PO2, PO6,PO8
CO2	Explain demand concepts, underlying theories and identify demand forecasting techniques.	PO6, PO8
CO3	Employ production, cost and supply analysis for business decision making	PO1, PO2,PO6
CO4	Identify pricing strategies	PO1, PO2,PO6
CO5	Classify market structures under competitive scenarios.	PO2, PO6, PO8

BASICS OF EVENT MANAGEMENT

COs	On completion of this course, students will;	POs
CO1	To understand basics of event management	PO1, PO6
CO2	To design events	PO5, PO6
CO3	To study feasibility of organising an event	PO2, PO6
CO4	To gain Familiarity with marketing & promotion of event	PO6
CO5	To develop event budget	PO6, PO8

MANAGERIAL COMMUNICATION

COs	On completion of this course, students will;	**POs**
CO1	Understand communication process and its barriers	PO1,PO2,PO 3,PO4, PO8
CO2	Develop business letters in different scenarios	PO1,PO2,PO 3,PO4, PO5,PO6
CO3	Develop oral communication skills & conducting interviews	PO2,PO3,PO 4,PO5, PO6,PO7
CO4	Use managerial writing for business communication	PO1,PO2,PO 4,PO5, PO6,PO8
CO5	Identify usage of modern communication tools & its significance for managers	PO3,PO4,PO 5,PO6, PO7,PO8

ORGANIZATIONAL BEHAVIOUR

COs	On Completion of the course the students will	POs
CO1	To define Organisational Behaviour, Understand the opportunity through OB.	PO1, PO2, PO6, PO7
CO2	To apply self-awareness, motivation, leadership and learning theories at workplace	PO2,PO4. PO5, PO6
CO3	To analyze the complexities and solutions of group behaviour	PO1, PO2 ,PO4, PO5, PO6
CO4	To impact and bring positive change in the culture of the organisaiton	PO2 PO5, PO8 PO3, PO4
CO5	To create a congenial climate in the organization.	PO1, PO2, PO5 PO6, PO8

ACCOUNTING FOR MANAGEMENT II

COs	**On completion of this course, students will;**	**POs**
CO1	Interpret cost sheet & write comments	PO1, PO2, PO4
CO2	Compare cost, management & financial accounting	PO6
CO3	Analyze the various ratio and compare it with standards to assess deviations	PO2, PO6
CO4	Estimate budget and use budgetary control	PO1, PO2,PO8
CO5	Evaluate marginal costing and its components	PO2, PO6

BUSINESS REGULATORY FRAME WORK

COs	On Completion of the course the students will	POs
CO1	Explain Indian Contracts Act	PO1,PO3,PO6,PO8
CO2	Understand Sales of goods act and Contract of Agency	PO1,PO2,PO3,PO4, PO5,PO8
CO3	Understand Indian Companies Act 1956	PO3,PO4,PO6,PO8
CO4	Understand Consumer Protection Act – RTI	PO1,PO2,PO3,PO6, PO7,PO8
CO5	Understand Cyber law	PO1,PO3,PO6,PO7, PO8

MANAGERIAL SKILL DEVELOPMENT

COs	On completion of this course, students will;	POs
CO1	Identify the personal qualities that are needed to sustain in the world of work	PO1, PO2, PO6, PO7
CO2	Explore more advanced Management Skills such as conflict resolution, empowerment, working with teams and creating a positive environment for change.	PO1, PO2, PO5
CO3	Acquire practical management skills that are of immediate use in management or leadership positions.	PO6, PO7
CO4	Employ critical-thinking and analytical skills to investigate complex business problems to propose viable solutions.	PO1, PO2
CO5	Make persuasive presentations that reveal strong written and oral communication skills needed in the workplace.	PO4

BUSINESS ETIQUETTE AND CORPORATE GROOMING

COS	On completion of this course, students will;	POs
CO1	Describe basic concepts of business etiquette and corporate grooming.	PO5, PO6
CO2	Outline the etiquette and grooming standards followed in business environment and the significance of communication	PO4, PO2, PO5, PO6
CO3	Create cultural awareness and moral practices in real life workplace scenarios	PO8, PO6
CO4	Analyze work place courtesy and resolve ethical issues with respect to etiquette and grooming for success	PO1, PO3, PO8, PO6
CO5	Apply the professionalism in the workplace considering diversity and courtesy	PO3, PO8, PO6

4. B.COM

Programme Outcomes:	**PO1: Disciplinary knowledge:** Capable of demonstrating comprehensive knowledge and understanding of one or more disciplines that form a part of an undergraduate Programme of study. **PO2: Communication Skills:** Ability to express thoughts and ideas effectively in writing and orally; Communicate with others using appropriate media; confidently share one's views and express herself/himself; demonstrate the ability to listen carefully, read and write analytically, and present complex information in a clear and concise manner to different groups. **PO3: Critical thinking:** Capability to apply analytic thought to a body of knowledge; analyse and evaluate evidence, arguments, claims, beliefs on the basis of empirical evidence; identify relevant assumptions or implications; formulate coherent arguments; critically evaluate practices, policies and theories by following scientific approach to knowledge development. **PO4: Problem solving:** Capacity to extrapolate from what one has learned and apply their competencies to solve different kinds of nonfamiliar problems, rather than replicate curriculum content knowledge; and apply one's learning to real life situations. **PO5: Analytical reasoning:** Ability to evaluate the reliability and relevance of evidence; identify logical flaws and holes in the arguments of others; analyze and synthesize data from a variety of sources; draw valid conclusions and support them with evidence and examples, and addressing opposing viewpoints. **PO6: Research-related skills:** A sense of inquiry and capability for asking relevant/appropriate questions, problem arising, synthesising and articulating; Ability to recognise cause-and-effect relationships, define problems, formulate hypotheses, test hypotheses, analyse, interpret and draw conclusions from data, establish hypotheses, predict cause-and-effect relationships; ability to plan, execute and report the results of an experiment or investigation **PO7: Cooperation/Team work:** Ability to work effectively and

	respectfully with diverse teams; facilitate cooperative or coordinated effort on the part of a group, and act together as a group or a team in the interests of a common cause and work efficiently as a member of a team **PO8: Scientific reasoning:** Ability to analyse, interpret and draw conclusions from quantitative/qualitative data; and critically evaluate ideas, evidence and experiences from an open-minded and reasoned perspective. **PO9: Reflective thinking:** Critical sensibility to lived experiences, with self awareness and reflexivity of both self and society. **PO10 Information/digital literacy:** Capability to use ICT in a variety of learning situations, demonstrate ability to access, evaluate, and use a variety of relevant information sources; and use appropriate software for analysis of data. **PO 11 Self-directed learning:** Ability to work independently, identify appropriate resources required for a project, and manage a project through to completion. **PO 12 Multicultural competence:** Possess knowledge of the values and beliefs of multiple cultures and a global perspective; and capability to effectively engage in a multicultural society and interact respectfully with diverse groups. **PO 13: Moral and ethical awareness/reasoning:** Ability to embrace moral/ethical values in conducting one's life, formulate a position/argument about an ethical issue from multiple perspectives, and use ethical practices in all work. Capable of demonstratingthe ability to identify ethical issues related to one‟s work, avoid unethical behaviour such as fabrication, falsification or misrepresentation of data or committing plagiarism, not adhering to intellectual property rights; appreciating environmental and sustainability issues; and adopting objective, unbiased and truthful actions in all aspects of work. **PO 14: Leadership readiness/qualities:** Capability for mapping out the tasks of a team or an organization, and setting direction, formulating an inspiring vision, building a team who can help achieve the vision, motivating and inspiring team members to engage with that vision, and using management skills to guide people to the right destination, in a smooth and efficient way.

	PO 15: Lifelong learning: Ability to acquire knowledge and skills, including „learning how to learn", that are necessary for participating in learning activities throughout life, through self-paced and self-directed learning aimed at personal development, meeting economic, social and cultural objectives, and adapting to changing trades and demands of work place through knowledge/skill development/reskilling.

Programme Specific Outcomes:	**PSO1 – Placement:** To prepare the students who will demonstrate respectful engagement with others' ideas, behaviors, beliefs and apply diverse frames of reference to decisions and actions. **PSO2 - Entrepreneur:** To create effective entrepreneurs by enhancing their critical thinking, problem solving, decision making and leadership skill that will facilitate startups and high potential organizations **PSO3 – Research and Development:** Design and implement HR systems and practices grounded in research that comply with employment laws, leading the organization towards growth and development. **PSO4 – Contribution to Business World:** To produce employable, ethical and innovative professionals to sustain in the dynamic business world. **PSO5 – Contribution to the Society:** To contribute to the development of the society by collaborating with stakeholders for mutual benefit

FINANCIAL ACCOUNTING I

COs	Course Outcomes
CO1	Remember the concept of rectification of errors and Bank reconciliation statements
CO2	Apply the knowledge in preparing detailed accounts of sole trading concerns
CO3	Analyse the various methods of providing depreciation
CO4	Evaluate the methods of calculation of profit
CO5	Determine the royalty accounting treatment and claims from insurance companies in case of loss of stock.

PRINCIPLES OF MANAGEMENT

COs	On completion of this course, students will;
CO1	Demonstrate the importance of principles of management.
CO2	Paraphrase the importance of planning and decision making in an organization.
CO3	Comprehend the concept of various authorizes and responsibilities of an organization
CO4	Enumerate the various methods of Performance appraisal
CO5	Demonstrate the notion of directing, co-coordination and control in the management.

BUSINESS COMMUNICATION

COs	**On completion of this course, students will;**
CO1	Acquire the basic concept of business communication.
CO2	CO2 Exposed to effective business letter
CO3	CO3 Paraphrase the concept of various correspondences.
CO4	Prepare Secretarial Correspondence like agenda, minutes and various business reports
CO5	Acquire the skill of preparing an effective resume

INDIAN ECONOMIC DEVELOPMENT

COs	On completion of this course, students will;
CO1	Elaborate the role of State and Market in Economic Development
CO2	Explain the Sectorial contribution to National Income
CO3	Illustrate and Compare National Income at constant and current prices.
CO4	Describe the canons of public expenditure
CO5	Understand the theories of money and supply

BUSINESS ECONOMICS

COs	On completion of this course, students will;
CO1	Explain the positive and negative approaches in economic analysis
CO2	Understood the factors of demand forecasting
CO3	Know the assumptions and significance of indifference curve
CO4	Outline the internal and external economies of scale
CO5	Relate and apply the various methods of pricing

DIGITAL BANKING

COs	On completion of this course, students will;
CO1	Acquire practical knowledge in MSWord
CO2	Construct worksheet in MS Excel using basic functions
CO3	Construct Excel sheets in MS Excel using advanced functions
CO4	Prepare presentations in MS Power Point using various Templates
CO5	Create a data base using Power point

MS OFFICE

Cos	On completion of this course, students will;
CO1	Acquire practical knowledge in MSWord
CO2	Construct work sheet in MS Excel using basic functions
CO3	Construct Excel sheets in MS Excel using advanced functions
CO4	Prepare presentations in MS Power Point using various Templates
CO5	Create a database using Power point

FUNDAMENTALS OF BUSINESS STUDIES

COs	On completion of this course, students will;
CO1	To make the students familiar with the basic concepts of commerce, and Management Fields.
CO2	To encourage and motivate the Students for the commerce Education
CO3	To make the students aware towards the various branches of commerce for Example, Accounts, Banking and Auditing

FINANCIAL ACCOUNTING-II

COs	On completion of this course, students will;
CO1	To evaluate the Hire purchase accounts and Instalment systems
CO2	To prepare Branch accounts and Departmental Accounts
CO3	To understand the accounting treatment for admission and retirement in partnership
CO4	To know Settlement of accounts at the time of dissolution of a firm
CO5	To elaborate the role of IFRS

BUSINESS LAW

COs	On completion of this course, students will;
CO1	Explain the Objectives and significance of Mercantile law
CO2	Understand the clauses and exceptions of Indian Contract Act
CO3	Outline the contract of indemnity and guarantee
CO4	Familiar with the provision relating to Bailment and Pledge
CO5	Explain the various provisions of Sale of Goods Act 1930

BUSINESS ENVIRONMENT

COs	On completion of this course, students will;
CO1	Remember the nexus between environment and business.
CO2	Apply the knowledge of Political Environment in which the businesses operate.
CO3	Analyze the various aspects of Social and Cultural Environment
CO4	Evaluate the parameters in Economic Environment.
CO5	Create a conducive Technological Environment for business to operate globally.

INSURANCE AND RISK MANAGEMENT

COs	On completion of this course, students will;
CO1	Identify the workings of insurance and hedging
CO2	Evaluate the types of insurance policies and settlement
CO3	Settle claims under various types of general insurance
CO4	Know the protection provided for insurance policy holders under IRDA
CO5	Evaluate the assessment and retention of risk

INTERNATIONAL TRADE

COs	On completion of this course, students will;
CO1	Distinguish between the concept of internal and international trade.
CO2	Define the various theories of international trade.
CO3	Examine the balance of trade and exchange rates
CO4	Appraise the role of IMF and IBRD.
CO5	Define the workings of WTO and with special reference to India

STOCK MARKET OPERATIONS

COs	On completion of this course, students will;
CO1	Explain the basic concept of Securities Market
CO2	Practice Trading on Stock Market
CO3	Analyse the legal Frame work of Securities Market
CO4	Explain different segment of Stock Exchange
CO5	Perform Demat Trading

NEW VENTURE PLANNING & DEVELOPMENT

COs	On completion of this course, students will;
CO1	Generate a business idea using different techniques and describe sources of innovative ideas
CO2	Evaluate advantages of acquiring a non going venture with a case study
CO3	Present a comparative analysis of various government schemes which are suitable for the business idea;
CO4	Develop a marketing plan for a business idea
CO5	Prepare and present a well-conceived Business Plan

5.B.SC., MATHEMATICS

Programme Outcomes:

PO1:	**Disciplinary Knowledge:** Capable of demonstrating comprehensive knowledge and understanding of one or more disciplines that form a part of an undergraduate programme of study.
PO2:	**Critical Thinking:** Capability to apply analytic thought to a body of knowledge; analyse and evaluate evidence, arguments, claims, beliefs on the basis of empirical evidence; identify relevant assumptions or implications; formulate coherent arguments; critically evaluate practices, policies and theories by following scientific approach to knowledge development.
PO3:	**Problem Solving:** Capacity to extrapolate from what one has learned and apply their competencies to solve different kinds of non-familiar problems, rather than replicate curriculum content knowledge; and apply one‟s earning to real life situations.
PO4:	**Analytical Reasoning:** Ability to evaluate the reliability and relevance of evidence; identify logical flaws and holes in the arguments of others; analyze and synthesize data from a variety of sources; draw valid conclusions and support them with evidence and examples and addressing opposing viewpoints.
PO5:	**Scientific Reasoning:** Ability to analyse, interpret and draw conclusions from quantitative / qualitative data; and critically evaluate ideas, evidence, and experiences from an open minded and reasoned perspective.
PO6:	**Self-directed & Lifelong Learning:** Ability to work independently, identify and manage a project. Ability to acquire knowledge and skills, including “learning how to learn”, through selfplaced and self-directed learning aimed at personal development, meeting economic, social and cultural objectives

Programme Specific Outcomes:

PSO1	Acquire good knowledge and understanding to solve specific theoretical & applied problems in different area of mathematics & statistics.
PSO2	Understand formulate develop mathematical arguments logically and use quantitative models to address issues arising in social sciences business and other context /fields
PSO3	To prepare the students who will demonstrate respectful engagement with other"s ideas behaviors beliefs and apply diverse frames of references to decisions and actions. To create effective entrepreneurs by enhancing their critical thinking problem solving decision making and leadership skill that will facilitate startups and high potential organizations

ALGEBRA & TRIGONOMETRY

COs	On completion of this course, students will;
CO1	Classify and Solve reciprocal equations.
CO 2	Find the sum of binomial, exponential and logarithmic series.
CO 3	Find Eigen values, eigen vectors, verify Cayley – Hamilton theorem.
CO 4	Expand the powers and multiples of trigonometric functions in terms of sine and cosine
CO 5	Determine relationship between circular and hyperbolic functions.

DIFFERENTIAL CALCULUS

COs	On completion of this course, students will;
CO1	Find the nth derivative, form equations involving derivatives and apply Leibnitz formula
CO2	Find the partial derivative and total derivative coefficient
CO3	Use the Lagrange's method of undetermined multipliers
CO4	Find the envelope of a given family of curves
CO5	Find the evolutes and involutes and to find the radius of curvature using polar coordinates

BRIDGE MATHEMATICS

COs	On completion of this course, students will;
CO1	Prove the binomial theorem and apply it to find the expansions of any (x + y)n and also, solve the related problems
CO2	Find the various sequences and series and solve the problems related to them. Explain the principle of counting.
CO 3	Find the number of permutations and combinations in different cases. Apply the principle of counting to solve the problems on permutations and combinations
CO4	Explain various trigonometric ratios and find them for different angles, including sum of the angles, multiple and submultiple angles, etc. Also, they can solve the problems using the transformations.
CO 5	Find the limit and derivative of a function at a point, the definite and indefinite integral of a function. Find the points of min/max of a function.

ANALYTICAL GEOMETRY (Two & Three Dimensions)

COs	On completion of this course, students will;
CO1	Find pole, polar for conics, diameters, conjugate diameters for ellipse and hyperbola
CO2	Find the polar equations of straight line and circle, equations of chord, tangent and normal
CO3	Explain in detail the system of Planes
CO4	Explain in detail the system of Straight lines
CO5	Explain in detail the system of Spheres

INTEGRAL CALCULUS

COs	On completion of this course, students will;
CO1	Determine the integrals of algebraic, trigonometric and logarithmic functions and to find the reduction formulae
CO2	Evaluate double and triple integrals and problems using change of order of integration
CO3	Solve multiple integrals and to find the areas of curved surfaces and volumes of solids of revolution
CO4	Explain beta and gamma functions and to use them in solving problems of integration
CO5	Explain Geometric and Physical applications of integral calculus

6.B.SC., PHYSICS

Programme Outcomes:	**PO1: Disciplinary knowledge:** Capable of demonstrating comprehensive knowledge and understanding of one or more disciplines that form a part of an undergraduate programme of study **PO2: Communication Skills:** Ability to express thoughts and ideas effectively in writing and orally communicate with others using appropriate media; confidently share one's views and express herself/himself; demonstrate the ability to listen carefully; read and write analytically and present complex information in a clear and concise manner to different groups. **PO3: Critical thinking:** Capability to apply the analytic thought to a body of knowledge; analyse and evaluate the proofs, arguments, claims, beliefs on the basis of empirical evidences; identify relevant assumptions or implications; formulate coherent arguments; critically evaluate practices, policies and theories by following scientific approach. **PO4: Problem solving:** Capacity to extrapolate from what one has learned and apply their competencies to solve different kinds of non-familiar problems, rather than replicate curriculum content knowledge; and apply one's learning to real life situations. **PO5: Analytical reasoning:** Ability to evaluate the reliability and relevance of evidence; identify logical flaws and holes in the arguments of others; analyze and synthesize data from a variety of sources; draw valid conclusions and support them with evidence and examples, and addressing opposing viewpoints. **PO6: Research-related skills:** A sense of inquiry and capability for asking relevant/appropriate questions, problem arising, synthesising and articulating; Ability to recognise cause-and-effect relationships, define problems, formulate hypotheses, test hypotheses, analyse, interpret and draw conclusions from data, establish hypotheses, predict cause-and-effect relationships; ability to plan, execute and report the results of an experiment or investigation. **PO7: Cooperation/Team work:** Ability to work effectively and respectfully with diverse teams; facilitate cooperative or coordinated effort on the part of a group, and act together as a group or a team in the interests of a common cause and work

	efficiently as a member of a team. **PO8: Scientific reasoning:** Ability to analyse, interpret and draw conclusions from quantitative/qualitative data; and critically evaluate ideas, evidence and experiences from an open-minded and reasoned perspective. **PO9: Reflective thinking:** Critical sensibility to lived experiences, with self-awareness and reflexivity of both self and society. **PO10 Information/digital literacy:** Capability to use ICT in a variety of learning situations, demonstrate ability to access, evaluate, and use a variety of relevant information sources; and use appropriate software for analysis of data. **PO 11 Self-directed learning:** Ability to work independently, identify appropriate resources required for a project, and manage a project through to completion. **PO 12 Multicultural competence:** Possess knowledge of the values and beliefs of multiple cultures and a global perspective; and capability to effectively engage in a multicultural society and interact respectfully with diverse groups. **PO 13: Moral and ethical awareness/reasoning:** Ability to embrace moral/ethical values in conducting one's life, formulate a position/argument about an ethical issue from multiple perspectives, and use ethical practices in all work. Capable of demonstrating the ability to identify ethical issues related to one's work, avoid unethical behaviour such as fabrication, falsification or misrepresentation of data or committing plagiarism, not adhering to intellectual property rights; appreciating environmental and sustainability issues; and adopting objective, unbiased and truthful actions in all aspects of work. **PO 14: Leadership readiness/qualities:** Capability for mapping out the tasks of a team or an organization, and setting direction, formulating an inspiring vision, building a team who can help achieve the vision, motivating and inspiring team members to engage with that vision, and using management skills to guide people to the right destination, in a smooth and efficient way. **PO 15: Lifelong learning:** Ability to acquire knowledge and skills, including „learning how to learn", that are necessary for

	participating in learning activities throughout life, through self-paced and self-directed learning aimed at personal development, meeting economic, social and cultural objectives, and adapting to changing trades and demands of work place through knowledge/skill development/reskilling

Programme Specific Outcomes	**PSO1: Placement:** To prepare the students who will demonstrate respectful engagement with others' ideas, behaviors, and beliefs and apply diverse frames of reference to decisions and actions. **PSO 2: Entrepreneur:** To create effective entrepreneurs by enhancing their critical thinking, problem solving, decision making and leadership skill that will facilitate start-ups and high potential organizations based on their curriculum or adopt from UGC or University for their **PSO3: Research and Development:** Design and implement HR systems and practices grounded in research that comply with employment laws, leading the organization towards growth and development. **PSO4: Contribution to Business World:** To produce employable, ethical and innovative professionals to sustain in the dynamic business world **PSO 5: Contribution to the Society:** To contribute to the development of the society by collaborating with stakeholders for mutual benefit

METHOD OF EVALUATION

COs	On completion of this course, students will;
CO1	Apply concept of vectors to understand concepts of Physics and solve problems
CO2	Appreciate different forces present in Nature while learning about phenomena related to these different forces.
CO3	Quantify energy in different process and relate momentum, velocity and energy
CO4	Differentiate different types of motions they would encounter in various courses and understand their basis
CO5	Relate various properties of matter with their behaviour and connect them with different physical parameters involved.

PROPERTIES OF MATTER AND ACOUSTICS

COs	On completion of this course, students will;
CO1	Relate elastic behavior in terms of three module of elasticity and working of torsion pendulum.
CO2	Able to appreciate concept of bending of beams and analyze the expression, quantify and understand nature of materials.
CO3	Explain the surface tension and viscosity of fluid and support the interesting phenomena associated with liquid surface, soap films provide an analogue solution to many engineering problems.
CO4	Analyze simple harmonic motions mathematically and apply them. Understand the concept of resonance and use it to evaluate the frequency of vibration. Set up experiment to evaluate frequency of ac mains
CO5	Understand the concept of acoustics, importance of constructing buildings with good acoustics. Able to apply their knowledge of ultrasonics in real life, especially in medical field and assimilate different methods of production of ultrasonic waves

HEAT, THERMODYNAMICS AND STATISTICAL PHYSICS

COs	On completion of this course, students will;
CO1	Acquires knowledge on how to distinguish between temperature and heat. Introduce him/her to the field of thermometry and explain practical measurements of high temperature as well as low temperature physics. Student identifies the relationship between heat capacity, specific heat capacity. The study of Low temperature Physics sets the basis for the students to understand cryogenics, superconductivity, superfluidity and Condensed Matter Physics
CO2	Derive the efficiency of Carnot's engine. Discuss the implications of the laws of Thermodynamics in diesel and petrol engines
CO3	Able to analyze performance of thermodynamic systems viz efficiency by problems. Gets an insight into thermodynamic properties like enthalpy, entropy
CO4	Study the process of thermal conductivity and apply it to good and bad conductors. Quantify different parameters related to heat, relate them with various physical parameters and analyse them
CO5	Interpret classical statistics concepts such as phase space, ensemble, Maxwell-Boltzmann distribution law. Develop the statistical interpretation of Bose-Einstein and Fermi-Dirac . Apply to quantum particles such as photon and electron

ALLIED PHYSICS – I

COs	On completion of this course, students will;
CO1	Explain types of motion and extend their knowledge in the study of various dynamic motions analyze and demonstrate mathematically. Relate theory with practical applications in medical field.
CO2	Explain their knowledge of understanding about materials and their behaviors and apply it to various situations in laboratory and real life. Connect droplet theory with Corona transmission
CO3	Comprehend basic concept of thermodynamics concept of entropy and associated theorems able to interpret the process of flow temperature physics in the background of
CO4	Articulate the knowledge about electric current resistance, capacitance in terms of potential electric field and electric correlate the connection between electric field and magnetic field and analyze them mathematically verify circuits and apply the concepts to construct circuits and study them.
CO5	Interpret the real life solutions using AND, OR, NOT basic logic gates and intend their ideas to universal building blocks. Infer operations using Boolean algebra and acquire elementary ideas of IC circuits. Acquire information about various Govt. programs/ institutions in this field.

ALLIED PHYSICS –II

COs	On completion of this course, students will;
CO1	Explain the concepts of interference diffraction using principles of superposition of waves and rephrase the concept of polarization based on wave patterns
CO2	Outline the basic foundation of different atom models and various experiments establishing quantum concepts. Relate the importance of interpreting improving theoretical models based on observation. Appreciate interdisciplinary nature of science and in solar energy related applications.
CO3	Summarize the properties of nuclei, nuclear forces structure of atomic nucleus and nuclear models. Solve problems on delay rate half-life and mean-life. Interpret nuclear processes like fission and fusion. Understand the importance of nuclear energy, safety measures carried and get our Govt. agencies like DAE guiding to nuclear field.
CO4	To describe the basic concepts of relativity like equivalence principle, inertial frames and Lorentz transformation. Extend their knowledge on concepts of relativity and vice versa. Relate this with current research in this field and get an overview of research projects of National and International importance, like LIGO, ICTS, and opportunities available.
CO5	Summarize the working of semiconductor devices like junction diode, Zener diode, transistors and practical devices we daily use like USB chargers and EV charging stations.

7.B.SC. CHEMISTRY

Programme Outcome	**PO1 :Disciplinary knowledge:** Capable of demonstrating comprehensive knowledge and understanding of one or more disciplines that form a part of an undergraduate Programme of study **PO2: Communication Skills:** Ability to express thoughts and ideas effectively in writing and orally; Communicate with others using appropriate media; confidently share one's views and express herself/himself; demonstrate the ability to listen carefully, read and write analytically, and present complex information in a clear and concise manner to different groups **PO3 :Critical thinking:** Capability to apply analytic thought to a body of knowledge; analyse and evaluate evidence, arguments, claims, beliefs on the basis of empirical evidence; identify relevant assumptions or implications; formulate coherent arguments; critically evaluate practices, policies and theories by following scientific approach to knowledge development **PO 4 :** Problem solving: Capacity to extrapolate from what one has learned and apply their competencies to solve different kinds of non-familiar problems, rather than replicate curriculum content knowledge; and apply one's learning to real life situations. **PO 5 :** Analytical reasoning: Ability to evaluate the reliability and relevance of evidence; identify logical flaws and holes in the arguments of others; analyze and synthesize data from a variety of sources; draw valid conclusions and support them with evidence and examples, and addressing opposing viewpoints. **PO 6 :** Research-related skills: A sense of inquiry and capability for asking relevant/appropriate questions, problem arising, synthesising and articulating; Ability to recognise cause-and-effect relationships, define problems, formulate hypotheses, test hypotheses, analyse, interpret and draw conclusions from data, establish hypotheses, predict cause-and-effect relationships; ability to plan, execute and report the results of an experiment or investigation **PO7:** Cooperation/Team work: Ability to work effectively and respectfully with diverse teams; facilitate cooperative or coordinated effort on the part of a group, and act together as a group or a team in the interests of a common cause and work efficiently as a member of a team

	PO8 : Scientific reasoning: Ability to analyse, interpret and draw conclusions from quantitative/qualitative data; and critically evaluate ideas, evidence and experiences from an open-minded and reasoned perspective. **PO9** : Reflective thinking: Critical sensibility to lived experiences, with self awareness and reflexivity of both self and society **PO10** : Information/digital literacy: Capability to use ICT in a variety of learning situations, demonstrate ability to access, evaluate, and use a variety of relevant information sources; and use appropriate software for analysis of data. **PO11** : Self-directed learning: Ability to work independently, identify appropriate resources required for a project, and manage a project through to completion. **PO12** : Multicultural competence: Possess knowledge of the values and beliefs of multiple cultures and a global perspective; and capability to effectively engage in a multicultural society and interact respectfully with diverse groups. **PO13** :Moral and ethical awareness/reasoning: Ability toembrace moral/ethical values in conducting one's life, formulate a position/argument about an ethical issue from multiple perspectives, and use ethical practices in all work. Capable of demonstratingthe ability to identify ethical issues related to one‟s work, avoid unethical behaviour such as fabrication, falsification or misrepresentation of data or committing plagiarism, not adhering to intellectual property rights; appreciating environmental and sustainability issues; and adopting objective, unbiased and truthful actions in all aspects of work. **PO14** : Leadership readiness/qualities: Capability for mapping out the tasks of a team or an organization, and setting direction, formulating an inspiring vision, building a team who can help achieve the vision, motivating and inspiring team members to engage with that vision, and using management skills to guide people to the right destination, in a smooth and efficient way. **PO 15 : Lifelong learning:** Ability to acquire knowledge and skills, including „learning how to learn‟, that are necessary for participating in learning activities throughout life, through

	self-paced and self-directed learning aimed at personal development, meeting economic, social and cultural objectives, and adapting to changing trades and demands of work place through knowledge/skill development/reskilling.

Programme Specific Outcomes	**PSO1**: Disciplinary Knowledge: Understand the fundamental principles, concepts, and theories related to physics and computer science. Also, exhibit proficiency in performing experiments in the laboratory. **PSO2:** Critical Thinking: Analyse complex problems, evaluate information, synthesize information, apply theoretical concepts to practical situations, identify assumptions and biases, make informed decisions and communicate effectively **PSO3:** Problem Solving: Employ theoretical concepts and critical reasoning ability with physical, mathematical and technical skills to solve problems, acquire data, analyze their physical significance and explore new design possibilities. **PSO4**: Analytical & Scientific Reasoning: Apply scientific methods, collect and analyse data, test hypotheses, evaluate evidence, apply statistical techniques and use computational models. **PSO5**: Research related skills: Formulate research questions, conduct literature reviews, design and execute research studies, communicate research findings and collaborate in research projects. **PSO6:** Self-directed & Lifelong Learning: Set learning goals, manage their own learning, reflect on their learning, adapt to new contexts, seek out new knowledge, collaborate with others and to continuously improve their skills and knowledge, through ongoing learning and professional development, and contribute to the growth and development of their field.

COs	On completion of this course, students will;
CO1	Explain the atomic structure, wave particle duality of matter, periodic properties bonding, and properties of compounds.
CO2	Classify the elements in the periodic table, types of bonds, reaction intermediates electronic effects in organic compounds, types of reagents
CO3	Apply the theories of atomic structure, bonding, to calculate energy of a spectral transition, Δx, Δp electronegativity, percentage ionic character and bond order
CO4	Evaluate the relationship existing between electronic configuration, bonding, geometry of molecules and reactions; structure reactivity and electronic effects
CO5	Construct MO diagrams, predict trends in periodic properties, assess the properties of elements, and explain hybridization in molecules, nature of H – bonding and organic reaction mechanisms.

QUANTITATIVE INORGANIC ESTIMATION (TITRIMETRY) AND INORGANIC PREPARATIONS

COs	**On successful completion of the course the students should be able to**
CO1:	Explain the basic principles involved in titrimetric analysis and inorganic preparations
CO2:	Compare the methodologies of different titrimetric analysis
CO3:	Calculate the concentrations of unknown solutions in different ways and develop the skill to estimate the amount of a substance present in a given solution.
CO4:	Assess the yield of different inorganic preparations and identify the end point of various titrations

ALLIED CHEMISTRY FOR PHYSICAL SCIENCES I

COs	On successful completion of the course the students should be able to
CO 1:	Gain in-depth knowledge about the theories of chemical bonding, nuclear reactions and its applications.
CO 2:	Evaluate the efficiencies and uses of various fuels and fertilizers
CO 3	Explain the type of hybridization, electronic effect and mechanism involved in the organic reactions explain the type of hybridization, electronic effect and mechanism involved in the organic reactions
CO 4:	Apply various thermodynamic principles, systems and phase rule.
CO 5:	Explain various methods to identify an appropriate method for the separation of chemical components

ALLIED CHEMISTRY PRACTICAL FOR PHYSICAL SCIENCES I

COs	**On successful completion of the course the students should be able to**
CO 1:	Gain an understanding of the use of standard flask and volumetric pipettes, burette.
CO 2:	Design, carry out, record and interpret the results of volumetric titration
CO 3:	Apply their skill in the analysis of water/hardness.
CO4:	Analyze the chemical constituents in allied chemical products

FOUNDATION COURSE

COs	On successful completion of the course the students should be able to
CO1:	Learn about atom structure and periodic properties.
CO2:	Gain knowledge on types of chemical bonding
CO3:	Explain different states of matter
CO4:	Discussion on nomenclature and isomerism in organic compounds
CO5:	Knowledge on electromagnetic radiation and its interation with matter

GENERAL CHEMISTRY-II

COs	On successful completion of the course the students should be able to
CO1	Explain the concept of acids, bases and ionic equilibria; periodic properties of s and p block elements, preparation and properties of aliphatic and aromatic hydrocarbons
CO2	Discuss the periodic properties of sand p- block elements, reactions of aliphatic and aromatic hydrocarbons and strength of acids
CO3	Classify hydrocarbons, types of reactions, acids and bases, examine the properties s and p block elements, reaction mechanisms of aliphatic and aromatic hydrocarbons
CO4	Explain theories of acids, bases and indicators, buffer action and important compounds of s block elements
CO5	Assess the application of hard and soft acids indicators, buffers, compounds of s and p- block elements and hydrocarbons

QUALITATIVE ORGANIC ANALYSIS AND PREPARATION OF ORGANIC COMPOUNDS

COs	**On successful completion of the course the students should be able to**
CO1:	Observe the physical state, odour, colour and solubility of the given organic compound.
CO2:	Identify the presence of special elements and functional group in an unknown organic compound performing a systematic analysis.
CO3:	Compare mono and dicarboxylic acids, primary, secondary and tertiary amines, mono and diamides, mono and polyhydric phenols, aldehyde and ketone, reducing and non- reducing sugars and explain the reactions behind it.
CO4:	Exhibit a solid derivative with respect to the identified functional group.

ALLIED CHEMISTRY FOR PHYSICAL SCIENCES II

COs	On successful completion of the course the students should be able to
CO 1:	Write the IUPAC name for complex, different theories to explain the bonding in coordination compounds and water technology
CO 2:	Explain the preparation and property of carbohydrate, amino acids and nucleic acids.
CO 3:	Apply/demonstrate the electrochemistry principles in corrosion, electroplating and fuel cells
CO 4:	Identify the reaction rate, order for chemical reaction and explain the purpose of a catalyst.
CO 5:	Outline the various type of photochemical process.

ALLIED CHEMISTRY PRACTICAL FOR PHYSICAL SCIENCES

COs	**On successful completion of the course the students should be able to**
CO1	Gain an understanding of the use of standard flask and volumetric pipettes, burette
CO2	Design, carry out, record and interpret the results of volumetric titration.
CO3	Apply their skill in the analysis of water/hardness.
CO4	Analyze the chemical constituents in allied chemical products analyze the chemical constituents in allied chemical products

DAIRY CHEMISTRY

COs	On successful completion of the course the students should be able to
CO1	Understand about general composition of milk – constituents and its physical properties
CO2	Acquire knowledge about pasteurization of Milk and various types of pasteurization - Bottle, Batch and HTST Ultra High Temperature Pasteurization.
CO3	Learn about Cream and Butter their composition and how to estimate fat in cream and Ghee
CO4	Explain about Homogenized milk, flavoured milk, vitaminised milk and toned milk
CO5	Have an idea about how to make milk powder and its drying process - types of drying

COSMETICS AND PERSONAL GROOMING

COs	On successful completion of the course the students should be able to
CO1	Know about the composition of various cosmetic products
CO2	Understand chemical aspects and applications of hair care and dental care and skin care products.
CO3	Understand chemical aspects and applications of perfumes and skin care products.
CO4	To understand the methods of beauty treatments their advantages and disadvantage
CO5	Understand the hazards of cosmetic products.

8.B.SC., ZOOLOGY

Programme Outcomes:	**PO1: Disciplinary knowledge:** Capable of demonstrating comprehensive knowledge and understanding of one or more disciplines that form a part of an undergraduate Programme of study **PO2: Communication Skills:** Ability to express thoughts and ideas effectively in writing and orally; Communicate with others using appropriate media; confidently share one's views and express herself/himself; demonstrate the ability to listen carefully, read and write analytically, and present complex information in a clear and concise manner to different groups. **PO3: Critical thinking:** Capability to apply analytic thought to a body of knowledge; analyse and evaluate evidence, arguments, claims, beliefs on the basis of empirical evidence; identify relevant assumptions or implications; formulate coherent arguments; critically evaluate practices, policies and theories by following scientific approach to knowledge development. **PO4: Problem solving:** Capacity to extrapolate from what one has learned and apply their competencies to solve different kinds of nonfamiliar problems, rather than replicate curriculum content knowledge; and apply one's learning to real life situations. **PO5: Analytical reasoning:** Ability to evaluate the reliability and relevance of evidence; identify logical flaws and holes in the arguments of others; analyze and synthesize data from a variety of sources; draw valid conclusions and support them with evidence and examples, and addressing opposing viewpoints. **PO6: Research-related skills:** A sense of inquiry and capability for asking relevant/appropriate questions, problem arising, synthesising and articulating; Ability to recognise cause-and-effect relationships, define problems, formulate hypotheses, test hypotheses, analyse, interpret and draw conclusions from data, establish hypotheses, predict cause-and-effect relationships; ability to plan, execute and report the results of an experiment or investigation **PO7: Cooperation/Team work:** Ability to work effectively and respectfully with diverse teams; facilitate cooperative or coordinated effort on the part of a group, and act together as a

	group or a team in the interests of a common cause and work efficiently as a member of a team **PO8: Scientific reasoning:** Ability to analyse, interpret and draw conclusions from quantitative/qualitative data; and critically evaluate ideas, evidence and experiences from an open-minded and reasoned perspective. **PO9: Reflective thinking:** Critical sensibility to lived experiences, with self awareness and reflexivity of both self and society. **PO10 Information/digital literacy:** Capability to use ICT in a variety of learning situations, demonstrate ability to access, evaluate, and use a variety of relevant information sources; and use appropriate software for analysis of data. PO 11 Self-directed learning: Ability to work independently, identify appropriate resources required for a project, and manage a project through to completion. **PO 12 Multicultural competence:** Possess knowledge of the values and beliefs of multiple cultures and a global perspective; and capability to effectively engage in a multicultural society and interact respectfully with diverse groups. **PO 13: Moral and ethical awareness/reasoning:** Ability to embrace moral/ethical values in conducting one's life, formulate a position/argument about an ethical issue from multiple perspectives, and use ethical practices in all work. Capable of demonstrating the ability to identify ethical issues related to one's work, avoid unethical behaviour such as fabrication, falsification or misrepresentation of data or committing plagiarism, not adhering to intellectual property rights; appreciating environmental and sustainability issues; and adopting objective, unbiased and truthful actions in all aspects of work. **PO 14: Leadership readiness/qualities:** Capability for mapping out the tasks of a team or an organization, and setting direction, formulating an inspiring vision, building a team who can help achieve the vision, motivating and inspiring team members to engage with that vision, and using management skills to guide people to the right destination, in a smooth and efficient way. **PO 15: Lifelong learning:** Ability to acquire knowledge and skills, including „learning how to learn", that are necessary for

	participating in learning activities throughout life, through self-paced and self-directed learning aimed at personal development, meeting economic, social and cultural objectives, and adapting to changing trades and demands of work place through knowledge/skill development/reskilling.

Programme Specific Outcomes:

Programme Specific Outcomes:	**PSO1 – Placement:** To prepare the students who will demonstrate respectful engagement with others' ideas, behaviors, beliefs and apply diverse frames of reference to decisions and actions. **PSO 2 - Entrepreneur:** To create effective entrepreneurs by enhancing their critical thinking, problem solving, decision making and leadership skill that will facilitate startups and high potential organizations **PSO3 – Research and Development:** Design and implement HR systems and practices grounded in research that comply with employment laws, leading the organization towards growth and development. **PSO4 – Contribution to Business World:** To produce employable, ethical and innovative professionals to sustain in the dynamic business world. **PSO 5 – Contribution to the Society:** To contribute to the development of the society by collaborating with stakeholders for mutual benefit

INVERTEBRATA

COs	On successful completion of the course the students should be able to	POs
CO1	Understand the basic concepts of invertebrate animals and recall its structure and functions.	PO1
CO2	Illustrate and examine the systemic and functional morphology of various groups of invertebrata.	PO1, PO2
CO3	Differentiate and classify the animal's mode of life in various taxa and estimate the biodiversity.	PO4, PO6
CO4	To compare and distinguish the various physiological processes and organ systems in lower animals.	PO4, PO5, PO6
CO5	Infer and integrate the parasitic and economic importance of invertebrate animals.	PO3, PO8

LAB ON INVERTEBRATA

COs	On completion of this course, students will;	POs
CO1	Identify and label the external features of different groups of invertebrate animals.	PO1
CO2	Illustrate and examine the, nervous system and reproductive system of invertebrate animals.	PO1, PO2
CO3	Differentiate and compare the structure, function and mode of life of various groups of animals.	PO4, PO6
CO4	Compare and distinguish the dissected internal organs of lower animals.	PO4, PO5, PO6
CO5	Prepare and develop the mounting procedure of economically important invertebrates.	PO3,PO8

CHORDATA

COs	On completion of this course, students will;	POs
CO1	Classify, identify and recall the name and distinct features of different subphylum belonging to phylum Chordata.	PO1
CO2	Explain, and relate the origin, structural organization and evolutionary aspects of vertebrates.	PO1, PO2
CO3	Analyze, compare and distinguish the developmental stages and describe the important biological process.	PO3, PO4, PO5
CO4	Correlate the different modes of life and parental care among different vertebrates.	PO3, PO5, PO6
CO5	Summarise the morphology and ecological adaptations in vertebrates and list out the economic importance.	PO2, PO3, PO5, PO8

LAB ON CHORDATA

COs	On completion of this course, students will;	POs
CO1	Identify and recall the name and distinct external and internal features of animals belonging to phylum Chordata.	PO1
CO2	Explain the structural organization of various organs and systems in different classes of vertebrates.	PO1, PO2
CO3	Analyse, compare and distinguish the morphological features and developmental stages of chordates	PO4, PO6
CO4	Dissect and explain various organs and internal systems in different vertebrates and correlate its function.	PO4, PO5, PO6
CO5	Summarise the morphology and ecological adaptations in vertebrates and list out the economic importance.	PO3, PO8

ALLIED ZOOLOGY I

COs	On completion of this course, students will;	POs
CO1	Recall the characteristic features invertebrates and chordates.	PO1
CO2	Classify invertebrates up to class level and chordates up to order level	PO1, PO2
CO3	Explain and discuss the structural and functional organisation of some invertebrates and chordates	PO4, PO6
CO4	Relate the adaptations and habits of animals to their habitat	PO4, PO5, PO6
CO5	Analyse the taxonomic position of animals.	PO3, PO8

ALLIED ZOOLOGY II

COs	On completion of this course, students will;	POs
CO1	Recall the parts and working of body organs and developmental stages, name the patterns of inheritance and list different types of animal behaviour	PO1
CO2	Analyse the different developmental stages	PO1, PO2
CO3	Analyse the working of body and immune systems	PO4, PO6
CO4	Analyse the different patterns of inheritance	PO4, PO5, PO6
CO5	Relate the behaviour of animals to physiology. Analyse the different types of behaviour	PO3, PO8

ALLIED ZOOLOGY LAB COURSE I

COs	On completion of this course, students will;	POs
CO1	Recall the characteristic features invertebrates and chordates.	PO1
CO2	Classify invertebrates up to class level and chordates up to order level	PO1, PO2
CO3	Explain and discuss the structural and functional organisation of some invertebrates and chordates	PO4, PO6
CO4	Relate the adaptations and habits of animals to their habitat	PO4, PO5, PO6
CO5	Analyse the taxonomic position of animals. PO3, PO8	PO3, PO8

ALLIED ZOOLOGY LAB COURSE II

COs	On completion of this course, students will;	POs
CO1	Compare the different types of excretory products and pattern of excretion.	PO1,PO3 ,PO5
CO2	Examine the role of haemoglobin and Analyse the function of the heart, neurons and sense organs	PO1, PO3,PO5
CO3	Identify and examine the developmental stages and its significances.	PO6, PO8
CO4	Comprehend the role of genes and the pattern of inheritance	PO6, PO8
CO5	Understand and apply the theoretical knowledge about the immunization and behavioural types in daily life.	PO1,PO3 , PO8

BIOLOGY OF FISH

COs	On successful completion of the course the students should be able to
CO1:	Recognise the basic concept of biological features of fishes
CO2:	Understand and compare the structure and function
CO3:	Apply and synthesize the behaviour and feeding pattern
CO4:	Evaluate the strategy for rearing practices and marketing
CO5:	Design suitable breeding methods and scientific approach and the biology, food value, marketing of fishes and fishery products

GENERIC COURSE II -CAPTURE FISHERIES

COs	**On successful completion of the course the students should be able to**
CO1:	recollect the basic concepts of fisheries and recognize and solve the problems in capture fisheries
CO2:	understand and adopt suitable/ recent technology for capturing
CO3:	apply the knowledge on feeding pattern and design local strategy for management
CO4:	evaluate and adopt suitable marketing method and overcome the problems
CO5:	emphasize the application of laws and acts of Fisheries welfare

9.B.SC., COMPUTER SCIENCE

Programme Outcomes (PO)

PO1	Scientific aptitude will be developed in Students
PO2	Students will acquire basic Practical skills & Technical knowledge along with domain knowledge of different subjects in the Computer Science & humanities stream
PO3	Students will become employable; Students will be eligible for career opportunities in education field, Industry, or will be able to opt for entrepreneurship.
PO4	Students will possess basic subject knowledge required for higher studies, professional and applied courses
PO5	Students will be aware of and able to develop solution oriented approach towards various Social and Environmental issues.
PO6	Ability to acquire in-depth knowledge of several branches of Computer Science and aligned areas. This Programme helps learners in building a solid foundation for higher studies in Computer Science and applications.
PO7	The skills and knowledge gained leads to proficiency in analytical reasoning, which can be utilized in modelling and solving real life problems.
PO8	Utilize computer programming skills to solve theoretical and applied problems by critical understanding, analysis and synthesis.
PO9	To recognize patterns and to identify essential and relevant aspects of problems.
PO10	Ability to share ideas and insights while seeking and benefitting from knowledge and insight of others.
PO11	Mould the students into responsible citizens in a rapidly changing interdependent society

Programme Specific Outcomes

PSO1	Think in a critical and logical based manner
PSO2	Familiarize the students with suitable software tools of computer science and industrial applications to handle issues and solve problems in mathematics or statistics and real time application related sciences.
PSO3	Know when there is a need for information, to be able to identify, locate, evaluate, and effectively use that information for the issue or problem at hand.
PSO4	Understand, formulate, develop programming model with logical approaches to a Address issues arising in social science, business and other contexts.
PSO5	Acquire good knowledge and understanding to solve specific theoretical and applied problems in advanced areas of Computer science and Industrial statistics.
PSO6	Provide students/learners sufficient knowledge and skills enabling them to undertake further studies in Computer Science or Applications or Information Technology and its allied areas on multiple disciplines linked with Computer Science.
PSO7	Equip with Computer science technical ability, problem solving skills, creative talent and power of communication necessary for various forms of employment.
PSO8	Develop a range of generic skills helpful in employment, internships& societal activities.
PSO9	Get adequate exposure to global and local concerns that provides platform for further exploration into multi-dimensional aspects of computing sciences.

PYTHON PROGRAMMING

COs	On completion of this course, students will	POs
CO1	Learn the basics of python, Do simple programs on python, Learn how to use an array.	PO1, PO2, PO3, PO4, PO5, PO6
CO2	Develop program using selection statement, Work with Looping and jump statements, Do programs on Loops and jump statements.	PO1, PO2, PO3, PO4, PO5, PO6
CO3	Concept of function, function arguments, Implementing the concept strings in various application, Significance of Modules, Work with functions, Strings and modules.	PO1, PO2, PO3, PO4, PO5, PO6
CO4	Work with List, tuples and dictionary, Write program using list, tuples and dictionary.	PO1, PO2, PO3, PO4, PO5, PO6
CO5	Usage of File handlings in python, Concept of reading and writing files, Do programs using files.	PO1, PO2, PO3, PO4, PO5, PO6

OFFICE AUTOMATION LAB

COs	To know what they are going to learn
CO1:	Know how to solve various problems on discrete mathematics
CO2:	Use approximation to solve problems
CO3:	Differentiation and integration concept are applied
CO4:	Apply , direct methods for solving linear systems
CO5	Discrete solution of ordinary problems

PROBLEM SOLVING TECHNIQUES

COs	On completion of this course, students will	POs
CO1	Study the basic knowledge of Computers. Analyze the programming languages.	PO1, PO2, PO3, PO4, PO5, PO6
CO2	Study the data types and arithmetic operations. Know about the algorithms. Develop program using flow chart and pseudocode.	PO1, PO2, PO3, PO4, PO5, PO6
CO3	Determine the various operators. Explain about the structures. Illustrate the concept of Loops	PO1, PO2, PO3, PO4, PO5, PO6
CO4	Study about Numeric data and character-based data. Analyze about Arrays.	PO1, PO2, PO3, PO4, PO5, PO6
CO5	Explain about DFD Illustrate program modules. Creating and reading Files	PO1, PO2, PO3, PO4, PO5, PO6

DATA STRUCTURE AND ALGORITHMS

COs	On completion of this course, students will	POs
CO1	Understand the concept of Dynamic memory management, data types, algorithms, Big O notation	PO1,PO6
CO2	Understand basic data structures such as arrays, linked lists, stacks and queues	PO2
CO3	Describe the hash function and concepts of collision and its resolution methods	PO2,PO4
CO4	Solve problem involving graphs, trees and heaps	PO4,PO6
CO5	Apply Algorithm for solving problems like sorting, searching, insertion and deletion of data	PO5,PO6

DIGITAL LOGIC FUNDAMENTALS

COs	On completion of this course, students will	POs
CO1	Understand the concept of various number systems	PO1,PO6
CO2	Understand basic concepts of digital systems	PO2
CO3	Describe the storage structures	PO2,PO4
CO4	Solve problems using SOP and	PO4,PO6
CO5	Apply concepts for simplifications	PO5,PO6

INTRODUCTION TO HTML

COs	On completion of this course, students will	POs
CO1	Understand the concept of various tags	PO1,PO6
CO2	Understand basic designing	PO2
CO3	Describe the hash function and concepts of tables, designing etc	PO2,PO4
CO4	Solve problem involving style sheets	PO4,PO6
CO5	Apply the attributes in designing web pages	PO5,PO6

UNDERSTANDING INTERNET

COs	On completion of this course, students will	POs
CO1	Understand the concept of network	PO1,PO6
CO2	Understand basic languages	PO2
CO3	Describe the security hash function and concepts of security methods	PO2,PO4
CO4	Solve problem involving malware	PO4,PO6
CO5	Apply Algorithm for secure network	PO5,PO6

1. M.A ECONOMICS

Programme Outcomes (POs)

PO1	**Problem Solving Skill:** Apply knowledge of Management theories and Human Resource practices to solve business problems through research in Global context.
PO2	**Decision Making Skill:** Foster analytical and critical thinking abilities for data-based decision-making.
PO3	**Ethical Value:** Ability to incorporate quality, ethical and legal value-based perspectives to all organizational activities.
PO4	**Communication Skill:** Ability to develop communication, managerial and interpersonal skills.
PO5	**Individual and Team Leadership Skill:** Capability to lead themselves and the team to achieve organizational goals.
PO6	**Employability Skill :** Inculcate contemporary business practices to enhance employability skills in the competitive environment.
PO7	**Entrepreneurial Skill :** Equip with skills and competencies to become an entrepreneur.
PO8	**Contribution to Society :** Succeed in career endeavors and contribute significantly to society.
PO9	**Multicultural competence:** Possess knowledge of the values and beliefs of multiple cultures and a global perspective.
PO10	**Moral and ethical awareness/reasoning:** Ability to embrace moral/ethical values in conducting one's life.

Programme Specific Outcomes (PSOs)

PSO1	**Placement:** To prepare the students who will demonstrate respectful engagement with others' ideas, behaviors, beliefs and apply diverse frames of Reference to decisions and actions.
PSO2	**Entrepreneur:** To create effective entrepreneurs by enhancing their critical thinking, problem solving, decision making and leadership skill that will facilitate startups and high potential organizations.
PSO3	**Research and Development :** Design and implement HR systems and practices grounded in research that comply with employment laws, leading the organization towards growth and development.
PSO4	**Contribution to Business World:** To produce employable, ethical and innovative professionals to sustain in the dynamic business world.
PSO5	**Contribution to the Society:** To contribute to the development of the society by collaborating with stakeholders for mutual benefit.

ADVANCED MICRO ECONOMICS

COs	Upon Completion of this course, the Students will be able
CO1	To illustrate and analyse the theories of consumer behavior K1, K2, K4
CO2	To illustrate and identify the choice under uncertainty. K2, K3
CO3	To compare how price and output is determined in different market situations and evaluate the market structures K2, K4, K5
CO4	To identify and examine the alternative theories of firms. K3, K4
CO5	To define, explain, and compare the theory of distribution. K1, K2, K4

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create.

INDIAN ECONOMIC DEVELOPMENT AND POLICY

COs	Upon Completion of this course, the Students will be able
CO1	Understand the Structural change in Indian economy K1 K2 K3 K4
CO2	Assess the Performance of agricultural and Industrial sector K1 K2 K3 K4
CO3	Ability to learn the trends in the economy K1 K2 K3 K4
CO4	Understand the Impact of Poverty K1 K2 K3 K4
CO5	Identify Social Issues like Unemployment Gender disparities K1 K2 K3 K4

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create.

STATISTICS FOR ECONOMISTS

COs	Upon Completion of this course, the Students will be able
CO1	Summarize the basic Probability rules and understand theoretical distributions. K1 & K2
CO2	Acquire knowledge on the various sampling methods and testing of Hypotheses K2 & K3
CO3	Use t test and chi square for analysis K4
CO4	Understand the importance of one and two way ANOVA K5
CO5	Know the various Decision making tools available K6

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create.

MODERN ECONOMIC THOUGHT

COs	Upon Completion of this course, the Students will be able
CO1	Understand modern economic concept of role of Entrepreneur Innovation, Business Cycles and Capitalism and Socialism. K1, K2, K4
CO2	Ability to understand about Capital Formation, Disguised Unemployment Imperfect Competition and Mathematical Economic Analysis K1,K2, K3,K4
CO3	Understand the ideas of Permanent Income Hypothesis, Revealed Preference Theory, Social Welfare Function and Samuelson's Utility Possibility Approach K1,K2, K4
CO4	Gain knowledge about the ideas of Modern Indian Economists-Regional Economics, Ecological Theory of Population – Economics of Growth and Development-Economics of Fast K1, K2, K4
CO5	Understand economic ideas like role of Technological Progress-Poverty Deficit Financing and Public Expenditure, Human Factor in Economic Growth and Inequality and Concept of Capability K1,K2,K3,K4

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create.

RURAL ECONOMICS

COs	Upon Completion of this course, the Students will be able
CO1	To label and interpret the nature and scope of rural economics. K1,K2,
CO2	To define and demonstrate the theories of rural development and rural resources.K1,K2,
CO3	To recall, outline and determine rural demography and occupation structure. K1,K2,K5,
CO4	To organize, examine and evaluate rural poverty and unemployment. K3,K4,
CO5	To summarize, develop and explain the rural empowerment programs. K2,K3,K5,

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create

REGIONAL ECONOMICS

COs	Upon Completion of this course, the Students will be able
CO1	understand the Nature and scope of regional economics and its need K1 K3 k4
CO2	Discuss the Models of regional inter-regional and multi-regional models K4 K5
CO3	Evaluate the various theories of regional economic growth K2 K3 K4
CO4	Describes the Measurement of interregional economic growth at State level K4 K5
CO5	apply Regional Aspects of Stabilization and Growth Policy K1 K4 K5

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create.

WELFARE ECONOMICS

COs	Upon Completion of this course, the Students will be able
CO1	Summarize the Contribution to Welfare Economics K1 K2
CO2	Analyse the different approaches to Welfare Economics K3 K4
CO3	Interpret the development of Pareto Optimality Conditions K1 K2 K3
CO4	Explain the compensation Criteria of Economics K2 K5
CO5	Evaluate theories of Social Choice. K2 K4 K5

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create.

MONETARY ECONOMICS

COs	Upon Completion of this course, the Students will be able
CO1	To list out and outline the theories of money. K1,K2
CO2	To explain construct and distinguish various determinate of money supply and multiplier. K2,K3,K4
CO3	To label, explain and evaluate the capital market. K1,K2,K5
CO4	To define, illustrate and importance of banking sector. K1,K2,K5
CO5	To interpret and make use of monetary policy. K2,K3

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create

LABOUR ECONOMICS

COs	Upon Completion of this course, the Students will be able
CO1	study the recent trends of labour and their productivity K1, K3,K4
CO2	assess the determination of employment and wages K3,K4
CO3	Understand the trade unions and their impact on labour market K1, K4,K5
CO4	evaluate the Industrial relation K3,K4
CO5	analyze the current trends of social security measures K1,K4,K5

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create.

MATHEMATICAL ECONOMICS

COs	Upon Completion of this course, the Students will be able
CO1	Understand the mathematical structure of standard economic theoretical Framework K1, K2, K4
CO2	Equip students with mathematical tools to solve optimization problems appear in economic theory K2, K4, K5
CO3	Equip students with tools to read the technical writing appear in standard economic journals K1, K3, K4
CO4	analyse the dynamics of macroeconomic policies in an economy K1, K2, K4
CO5	analyse mathematically the dynamics of the growth process in an Economy K3, K2,K5

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create.

GENDER ECONOMICS

COs	Upon Completion of this course, the Students will be able
CO1	Understand the Gendered jobs and Social Inequality K1, K3
CO2	describes the Issues of wage discrimination and exploitation in unorganized sector K3,K4
CO3	Explain the Gender issues in Health, Environment, Family welfare Measures K4,K5
CO4	Evaluate the Impact of Globalization on working women and National Policy for the empowerment of women 2001 K1, K3,K4
CO5	Assess the Initiatives towards recognition of women as agents of development from sixth five year plan. K1,K4,K5

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create.

URBAN ECONOMICS

COs	Upon Completion of this course, the Students will be able
CO1	Understand scope of urban economics and urban economic growth K1, K2, K3
CO2	Describe the process of urbanization and classification or urban areas K3, K5
CO3	Evaluate the various theories of urban growth and spatial structure K2, K4
CO4	Explain the urban Labour Market, Labour Force Participation and Distribution of Workers K1, K2
CO5	Familiarize the urban problems and planning process. K1, K4, K5

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create.

RESOURCE ECONOMICS

COs	Upon Completion of this course, the Students will be able
CO1	Ability to understand land resources in India and the issues related to it K1, K2, K3,K4
CO2	Assess the availability of Forest resources and understand the methods to conserve the resources K1, K2, K3, K4
CO3	Understand the water resources in the country and related environmental issues K1, K2, K3K4
CO4	Trace the mineral resources in the country K1, K2, K3, K4
CO5	Ability to know about conservation of Natural Resources K1, K2, K3, K4

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create.

ECONOMICS OF CLIMATE CHANGE

COs	Upon Completion of this course, the Students will be able
CO1	To define and explain the science of climate change. K1 K2
CO2	To explain and identify the climate change policy. K2 K3
CO3	To illustrate and analyses the integrated assessment of climate changes. K2 K4
CO4	To classify compare and evaluate climate change impact assessment. K4 K5
CO5	To estimate and illustrate the climate change negotiations and equity. K5 K6

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create.

SOCIAL ETHICS AND RESPONSIBILITIES

COs	Upon Completion of this course, the Students will be able
CO1	Understand the importance of Ethics and outlining the various types of Ethical Issues in an organization K1 K2 K4
CO2	Categories the ethical issues in the workplace K2 K4 K5
CO3	Evaluate the need for Corporate Social Responsibility K1 K4
CO4	Design Policies for Social inclusion K4 K5
CO5	Know various schemes for disabled K5 K6

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create.

ADVANCED MACRO ECONOMICS

COs	Upon Completion of this course, the Students will be able
CO1	Defines and understand the concepts of general Equilibrium in the Economy and its models and approaches K1, K2
CO2	Define, Illustrate and examine the role of rational expectations influencing macroeconomics variables, models of income and the various approaches to the working of business cycles. K1, K2, K4
CO3	To demonstrate, identify and to understand the functions of the major propositions of new Keynesian macroeconomics K2, K3, K4
CO4	To understand how, Evaluate and to analyse the open economy model in post Keynesian era K1, K4, K5
CO5	To explain and apply the role of stabilization policies such as fiscal and monetary policy on the economy and to analyze, elaborate and to know the importance government policies and tax frame work K2, K3, K4, K5, K6

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create.

PUBLIC ECONOMICS

COs	Upon Completion of this course, the Students will be able
CO1	To label and interpret the basic theories of public finance. K1,K2,
CO2	To explain, identify and analyse the public expenditure. K2,K3,
CO3	To recall, outline and determine about taxes K1,K2,K5,
CO4	To organize, examine and evaluate about fiscal policy. K3,K4,
CO5	To summarize, develop and explain about Indian public finance. K2,K3,K5,

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create.

RESEARCH METHODOLOGY

COs	Upon Completion of this course, the Students will be able
CO1	To understand what are all the basic concepts in Research and explain Means of data collection K1, K2
CO2	Explain and distinguish various sources of primary and secondary data and to apply it in data collection K2, K3, K4
CO3	Demonstrate, construct, and explain the functions of presenting data In different methods K2, K4, K5, K6
CO4	To develop the statistical inference and to explain the errors that can Happen during data analysis K3, K4, K5, K6
CO5	To illustrate, identify, evaluate and create new models and evaluate the Data K2, K3, K4, K5, K6

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create.

AGRICULTURAL ECONOMICS

COs	Upon Completion of this course, the Students will be able
CO1	Understand the Relevance of Agricultural Economics K1, K2, K4
CO2	Review the role of Agricultural Labour K4, K5
CO3	Analyze the trends in Agricultural Prices and the importance of Finance in the Agricultural Sector K1, K3, K4
CO4	Evaluate the importance of Marketing in Agriculture K1, K3
CO5	Identify the impact of Globalisation and WTO on Indian Agriculture K5, K4

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create.

ECONOMICS IN EVERYDAY LIFE

COs	Upon Completion of this course, the Students will be able
CO1	To know what is price and to explain and identify its mechanism in economies function K1, K2, K3
CO2	To define, illustrate and evaluate the value of economics in social customs of the society K1, K2, K5
CO3	To find and examine the evils happening in the economy and to identify and measures to overcome those evils K1, K3, K4, K5
CO4	To illustrate, analyse the importance of various dimensions of economics In the society K2, K4, K5
CO5	Analyse, measure and to discuss the role of economics in the effective K4, K5, K6 61 functioning Of the Country

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create.

ENTREPRENEURIAL DEVELOPMENT

COs	Upon Completion of this course, the Students will be able
CO1	Understand the concept of Entrepreneurship K1 K2 K4
CO2	Ability to learn the factors involved in business K1 K2 K4
CO3	Identify the process involved in the project K1 K2 K3 K4
CO4	Assess the methods of Project Appraisal K1 K2 K3 K4 K5
CO5	Acquire the knowledge about source of Finance K1 K2 K3 K4

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create.

PERSONALITY DEVELOPMENT

COs	Upon Completion of this course, the Students will be able
CO1	Understand the importance of personality development K1 K2 K3
CO2	To evaluate the Characteristics of Personality K3 K5
CO3	Examine and analyse the concept of Self-evaluation K2 K4
CO4	Describes the concept of Qualities of Personality Development K1 K2
CO5	Create the self-evaluation and Organizational Context of Leadership and Personality K1 K4 K5

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create.

INTERNATIONAL ECONOMICS

COs	Upon Completion of this course, the Students will be able
CO1	Understand Theories of International trade K1, K2, K3
CO2	Learn the Recent Theories in International trade K1, K2, K3
CO3	Ability to know the concept of Balance of Payments Policies K1, K2, K3. K4
CO4	Assess the working of MNCs, Foreign Aid K1, K2, K3
CO5	Understand the working of Foreign Exchange K1, K2, K3,

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create.

DEVELOPMENT ECONOMICS

COs	Upon Completion of this course, the Students will be able
CO1	Understand the concepts of Development K1, K2, K3
CO2	Acquire knowledge about the theories of economic development K1, K2, K3
CO3	Ability to understand the concepts related to Poverty , Inequality, Health and Education K1, K2, K3
CO4	Gain knowledge about the insights of Rural Development K1, K2, K3, K4, K5
CO5	Understand the role of State in Fiscal Management K1, K2, K3, K4, K5

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create.

ECONOMICS OF SOCIAL ISSUES

COs	Upon Completion of this course, the Students will be able
CO1	To define social economics and illustrate the role of the government in creating equality in human societies. K1, K2
CO2	To explain and elaborate the concept of welfare economics with specific reference to healthcare. K2, K6
CO3	To illustrate and discuss the importance of education in creating human capital; private and social demand for education. K2, K6
CO4	To recall, classify and compare the various sources of social discrimination, causes and consequences of the same. K1, K2
CO5	To examine, estimate and illustrate the several components of human development index and the importance of these indices on development of the social sector. K4, K6

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create.

HUMAN RESOURCES DEVELOPMENT

COs	Upon Completion of this course, the Students will be able
CO1	To understand the outline of HRM and concepts therein. K1, K2, K4
CO2	To know the approaches in acquiring the human talents. K2, K4, K5
CO3	To analyze the trends in training and developing the manpower acquired. K1, K3, K4
CO4	To identify the methods to improve the performance. K1, K2, K4
CO5	To gain insight to motivate and retain the employees. K3, K2,K5

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create.

SKILL ENHANCEMENT COURSE ROLE OF MSMES - PRACTICE OF PUBLIC AND PRIVATE COMPANIES AND BANKING SYSTEMS

COs	Upon Completion of this course, the Students will be able
CO1	To define MSME and to explain the history of it in India K1,K2
CO2	To summarize and identify numerous schemes for MSMEs K2,K3, K4
CO3	To analyze and illustrate the programs for women and economic backward K2,K4
CO4	To know the functions of and discuss about MSME development Act K4, K6
CO5	To evaluate and estimate the role of WTO in the functioning of MSMEs K5,K6

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create.

ECONOMICS FOR COMPETITIVE EXAMINATION

COs	Upon Completion of this course, the Students will be able
CO1	To explain and outline the concepts of Economic growth and development. K1,K2
CO2	To explain and identify the problems of inclusion and poverty. K2,K3
CO3	To interpret, develop and determine the economic indicators and features of Indian Economy. K2,K3,K5
CO4	To illustrate and discuss the Agriculture and Industrial Sector. K2,K6
CO5	To determine and estimate the Public Finance. K5,K6

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create.

2. M.A., ENGLISH

POETRY

COs	On completion of this course, students will	POs
CO1	Demonstrate knowledge of the movements that influenced the literature beginning from English Poetry starting from Medieval to Modern Period.	PO1, PO2
CO2	Trace the evolution of various literary movements. Distinguish and analyse the different genres of writings of the period.	PO5,PO6
CO3	Critically evaluate the literary language of the texts Prescribed.	PO7
CO4	Compare the literature of the age with the subsequent ages in the history of English Literature and interpret its significance in history	PO8
CO5	Exhibit the skill of analyzing literary works and writing Effectively	PO9, PO10

DRAMA

COs	On completion of this course, students will	POs
CO1	Appraise various aspects of drama and theatre	PO1, PO2
CO2	Identify drama and performance as a cultural process and an artistic discourse	PO3,PO5
CO3	Evaluate plot structure, characterization and dialogue	PO4
CO4	Interpret drama texts as aesthetic records of their times viz., Elizabethan, Restoration, Victorian and Early Modern ages,	PO6,PO7,PO8
CO5	Examine the sequential course dealing with Modern and Postmodern British Drama	PO9,PO10

FICTION

COs	On completion of this course, students will;	POs
CO1	Acquaint the knowledge about the development of Novel as a literary form.	PO1, PO10
CO2	Identify the characteristics of different types of novels	PO2, PO3
CO3	Categorize the novels of different periods and Interpret the works of eminent writers.	PO4, PO5
CO4	Awareness on social, historical, literary and cultural elements of the changes in American Literature	PO4, PO5, PO6
CO5	Critically examine the works of the writers prescribed	PO7, PO8,PO10

INDIAN WRITING IN ENGLISH

COs	On completion of this course, students will;	POs
CO1	Understand the themes of Indian Writing in English	PO1
CO2	Identify the major trends in Indian Writing in English	PO1, PO2
CO3	Examine the background and settings of the prescribed texts	PO4, PO6
CO4	Evaluate the cultural significance of Indian English Literature	PO4, PO5, PO6
CO5	Be exposed to diverse culture and literature that will further enlighten them about socio-cultural scenario in the contemporary era.	PO3, PO8

AMERICAN LITERATURE

COs	On completion of this course, students will;	POs
CO1	Recognize the contributions of major American writers and their impact on the development of American literature	PO2
CO2	Analyze the movements and trends that shaped American literature	PO1, PO3
CO3	Gain knowledge about the transcendentalist and Romantics movements.	PO4, PO5
CO4	Validate representative socio-political, cultural, racial and gender perspectives in the prescribed texts	PO4, PO5, PO6
CO5	Critically analyze the multicultural sensibility of American society	PO8, PO10

SHAKESPEARE STUDIES

COs	On completion of this course, students will;	POs
CO1	Identify the social, cultural and political events as represented in the works of Shakespeare	PO1
CO2	Understand Elizabethan theatre and the theatre's development	PO3
CO3	Illustrate the linguistics richness and figurative language of the plays	PO4, PO5
CO4	Identify the trends and approaches in Shakespeare studies	PO6
CO5	Critically analyze the works of Shakespeare	PO7, PO10

POST-COLONIAL LITERATURE

COs	On completion of this course, students will;	POs
CO1	Evaluate the political and social background of the third world nations	PO2
CO2	Identify the emerging trends in Post- Colonial Literature	PO1, PO3
CO3	Examine the Problems and consequences of the decolonization of a country,	PO4, PO5
CO4	Examine the ethnocentric perspective of different colonial cultures with respect to postcolonial literature	PO6,P10
CO5	Interpret the postcolonial concepts found in different literary genres	PO7, PO8

CONTEMPORARY LITERARY CRITICISM

COs	On completion of this course, students will;	POs
CO1	Understand a literary text by applying various critical theories.	PO2, PO3
CO2	Develop the objective analysis of the subject matter	PO4
CO3	Analyze a literary text with reference to socio-political issues	PO5
CO4	Evaluate critically and aesthetically the prescribed texts.	PO6, PO8
CO5	Demonstrate an understanding of the changing emphasis in the study of literature from text towards context	PO9, PO10

LANGUAGE AND LINGUISTICS

COs	On completion of this course, students will;	POs
CO1	Recognize the historical background of Language and Literature	PO1, PO3
CO2	Apply the linguistic form to language use	PO1
CO3	Comprehend the classification and description of Word change	PO4
CO4	Analyze the syntactic, grammatical and semantic patterns	PO6, PO8
CO5	Demonstrate a fair knowledge of nature of language and its functions	PO9, PO10

WRITINGS OF THE MARGINALIZED

COs	On completion of this course, students will;	POs
CO1	Understand the historical and political background of Marginalized issues	PO1
CO2	Identify and analyze the texts of the marginalized writers	PO2
CO3	Analyze a literary text with reference to socio-political Issues	PO3, PO4
CO4	Recognize the predicament of the marginalized people	PO6, PO8
CO5	Experience the subaltern nation and people through the texts prescribed	PO9

COMPARATIVE LITERARURE AND CLASSICS IN TRANSLATION STUDIES

COs	On completion of this course, students will;	POs
CO1	Understand the systematic study of translation	PO1, PO3
CO2	Understanding the dimensions of language and its nuances essential for translation	PO2, PO5
CO3	Exposure to effective translation	PO4
CO4	Equipped in the skills as well as the politics of translation.	PO6, PO8
CO5	Exposure to literature in the regional languages through representative texts in English translation	PO9

A GLIMPSE OF NOBEL LAUREATES

COs	On completion of this course, students will;	POs
CO1	Relate the outstanding works of Nobel Laureates in an idealistic direction that adds the greatest benefit to humankind	PO1
CO2	Interpret the works of various Nobel Laureates	PO1, PO2,PO3
CO3	Analyse the different themes with regard to social, political and cultural aspects.	PO4, PO6
CO4	Evaluate critically and aesthetically the prescribed texts.	PO3, PO8
CO5	Perceive the influence of Nobel Laureates in Literature	PO9, PO10

PROJECT AND RESEARCH METHODOLOGY

COs	On completion of this course, students will;	POs
CO1	Comprehend the structure of a Research Thesis through its formatting process	PO2
CO2	Acquire the Mechanics of Academic writing	PO3, PO6
CO3	Learn the ethics in Research writing	PO1,PO2, PO5
CO4	Familiarize themselves with the documentation methodology	PO6
CO5	Get acquainted with the importance of citation and its relevant technicalities	PO8, PO9

SCIENCE FICTION, FANTASY AND DETECTIVE LITERATURE

COs	On completion of this course, students will;	POs
CO1	dentify different forms of Science Fiction, Fantasy and Detective Fiction	PO3
CO2	Fix the representative Detective Fiction in the larger context of Social changes.	PO2, PO6
CO3	Identify the basic Structure and themes of Science Fiction.	PO4. PO5
CO4	Appreciate the fundamental features and explore the major themes in fantasy fiction	PO6
CO5	Gain an understanding of contemporary and future science fiction by studying the history of the genre and many of the works that started important conversations about what it means to be human in a changing world.	PO10

APPROACHES AND METHODS IN ENGLISH LANGUAGE TEACHING

COs	**On completion of this course, students will;**	**POs**
CO1	Identify teaching methods/approaches	PO3
CO2	Learn to teach skills - L S R W and literature	PO1, PO2
CO3	Identify the objectives, active role of learners, teachers and materials	PO4, PO5
CO4	Testing and Evaluating learners using norm and criterion-referenced methods of assessment	PO3, PO7
CO5	Learn to prepare lesson plans to teach English	PO8, PO9

LIFE WRITINGS

COs	On completion of this course, students will;	POs
CO1	Become familiar with various subgenres of life writing.	PO2
CO2	Sensitize themselves to the predicament of various marginalized sections	PO3, PO6
CO3	Comprehend the significance of life writing as a literary genre.	PO1,PO2, PO5
CO4	Get acquainted with the role of personal narrative in writing history.	PO6
CO5	Comprehend the different socio, cultural and political dimensions	PO8, PO9

LITERATURE AND FILM

COs	On completion of this course, students will;	POs
CO1	Film Review and appreciation becomes handy for the Students	PO1,PO2
CO2	Connecting film and literature nuances effectively	PO3, PO4
CO3	Exposure to film techniques and genres	PO7
CO4	Critical appreciation of films	PO6,PO8
CO5	Analysing film forms effectively	PO10

TRAVEL WRITING

COs	On completion of this course, students will;	POs
CO1	Gain knowledge about various writers of the genre	PO1,PO2
CO2	Identify the unique characteristics of travel writing	PO3, PO4
CO3	Study literary texts as part of the ecological and environmental realities	PO7
CO4	Appreciate the difference in socio, political and cultural background of the prescribed texts	PO6,PO8
CO5	critically analyze the themes of the prescribed texts	PO10

ENTREPRENEURSHIP DEVELOPMENT

COs	On completion of this course, students will;	POs
CO1	Define basic terms and understand basic concepts in the area of entrepreneurship	PO1
CO2	Analyse the business environment in order to identify business opportunities	PO1, PO2
CO3	Identify the elements of success of entrepreneurial ventures	PO4, PO6 CO4
CO4	Consider the legal and financial conditions for starting a business venture	PO4, PO5, PO6
CO5	Evaluate the effectiveness of different entrepreneurial strategies and specify the basic performance indicators of entrepreneurial activity	PO3, PO8

THEATRE ART

COs	On completion of this course, students will	POs
CO1	Recognize a broad range of theatrical disciplines and experiences	PO2
CO2	Identify the diversity of theatrical experiences and the role of theatre in society	PO1, PO2
CO3	Discover the relationships among the various facets of Theatre	PO4, PO5
CO4	Estimate drama as a performing art and the aspects of Stagecraft	PO4, PO5, PO6
CO5	Be exposed to diverse components of acting and techniques	PO8, PO9

EMPLOYABILITY SKILLS

COs	On completion of this course, students will;	POs
CO1	Analyze the various types of communication	PO2,PO3
CO2	Learn about the four skills of language and get familiarized with them.	PO1, P04
CO3	Enhance their personal and professional development	PO5, PO6
CO4	Gain employability Skills for the current job market and future of work	PO7, PO8, PO9
CO5	Acquire self-confidence and behavioral Skills	PO10

ENGLISH FOR CAREERS

COs	On completion of this course, students will;	POs
CO1	Gain knowledge of the various modes of official correspondence and presentation	PO2
CO2	Comprehend the right use of English at official works	PO1, PO3
CO3	Apply the acquired styles of occupational skills and practicing them	PO4, PO5
CO4	Pick up the official behavior and becoming better doers	PO6, PO7
CO5	Market the skill business correspondence and fixing themselves in better jobs	PO8

ENGLISH FOR COMPETITIVE EXAMS

COs	On completion of this course, students will;	POs
CO1	Practise in objective exam pattern will ease the students tension while taking the real NET and SET exams.	PO2, PO3
CO2	Effectively attempting MCQs	PO1
CO3	Profound understanding about the various movements in English Literature	PO6
CO4	Understanding the nuances of competitive exams	PO7
CO5	Expertise in literature	PO6, PO10

TECHNICAL WRITING

COs	On completion of this course, students will;	POs
CO1	Appreciate the value of good written communication.	PO1
CO2	Use technical writing conventions of design, style, and layout of written materials	PO1, PO2
CO3	Understand the basic components of definitions, descriptions, process explanations, and other common forms of technical writing.	PO4, PO6
CO4	Familiar with basic technical writing concepts and terms, such as audience analysis, jargon, format, visuals, and presentation.	PO4, PO5, PO6
CO5	Able to read, understand, and interpret material on technology. Demonstrate knowledge on how to produce a variety of products and projects.	PO3, PO8

3. M.SC., MATHEMATICS

Programme Outcome

PO1	**Problem Solving Skill:** Apply knowledge of Management theories and Human Resource practices to solve business problems through research in Global context.
PO2	**Decision Making Skill:** Foster analytical and critical thinking abilities for data-based decision-making. PO3: Ethical Value: Ability to incorporate quality, ethical and legal value-based perspectives to all organizational activities.
PO4	**Communication Skill:** Ability to develop communication, managerial and interpersonal skills.
PO5	**Individual and Team Leadership Skill:** Capability to lead themselves and the team to achieve organizational goals.
PO6	**Employability Skill:** Inculcate contemporary business practices to enhance employability skills in the competitive environment.
PO7	**Entrepreneurial Skill:** Equip with skills and competencies to become an entrepreneur.
PO8	**Contribution to Society:** Succeed in career endeavors and contribute significantly to society.
PO9	**Multicultural competence:** Possess knowledge of the values and beliefs of multiple cultures and a global perspective.
PO10	**Moral and ethical awareness/reasoning:** Ability to embrace moral/ethical values in conducting one's life.

PROGRAMME SPECIFIC OUTCOMES(PSOs)

PSO1	**Placement**: To prepare the students who will demonstrate respectful engagement with others' ideas, behaviors, beliefs and apply diverse frames of reference to decisions and actions.
PSO2	**Entrepreneur**: To create effective entrepreneurs by enhancing their critical thinking, problem solving, decision making and leadership skills that will facilitate startups and high potential organizations.
PSO3	**Research and Development**: Design and implement HR systems and practices grounded in research that comply with employment laws, leading the organization towards growth and development.
PSO4	**Contribution to Business World**: To produce employability, ethical and innovative professionals to sustain in the dynamic business world.
PSO5	**Contribution to the Society:** To contribute to the development of the society by collaborating with stake holders form usual benefits.

ALGEBRAIC STRUCTURES

COs	On completion of this course, students will;
CO1:	Recall basic counting principle, define class equations to solve problems, explain Sylow's theorems and apply the theorem to find number of Sylow subgroups
CO2:	Define Solvable groups, define direct products, examine the properties of finite abelian groups, define modules
CO3:	Define similar Transformations, define invariant subspace, explore the properties of triangular matrix, to find the index of nil potence to decompose a space in to invariant subspaces, to find invariants of linear transformation, to explore the properties of nil potent transformation relating nil potence within variants.
CO4:	Define Jordan, canonical form, Jordan blocks, define rational canonical form, define companion matrix of polynomial, find the elementary devices of transformation, apply the concepts to find characteristic polynomial of linear transformation.
CO5:	Define trace, define transpose of a matrix, explain the properties of trace and transpose, to find trace, to find transpose of matrix, to prove Jacobson lemma using the triangular form, define symmetric matrix, skew symmetric matrix, adjoint, to define Hermitian, unitary, normal transformations and to verify whether the transformation in Hermitian, unitary and normal

REAL ANALYSIS-I

COs	On completion of this course, students will;
CO1	Analyze and evaluate functions of bounded variation and Rectifiable Curves.
CO2	Describe the concept of Riemann-Stieltjes integral and its properties.
CO3	Demonstrate the concept of step function, upper function, Lebesgue function and their integrals.
CO4	Construct various mathematical proofs using the properties of Lebesgue integrals and establish the Levimonotone convergence theorem.
CO5	Formulate the concept and properties of inner products, norms and measurable functions.

ORDINARY DIFFERENTIAL EQUATIONS

COs	**On completion of this course, students will;**
CO1	Establish the qualitative behavior of solutions of systems of differential equations.
CO2	Recognize the physical phenomena model led by differential equations and dynamical systems.
CO3	Analyze solutions using appropriate methods and give examples.
CO4	Formulate Green's function for boundary value problems.
CO5	Understand and use various theoretical ideas and results that underlie the mathematics in this course.

GRAPH THEORY AND APPLICATIONS

COs	**On completion of this course, students will;**
CO1:	Demonstrate the concept of different structures and types about graphs and explain its applications.
CO2:	Determine the properties of trees and applications in network and study the concepts of connections in graphs.
CO3:	Acquire the knowledge about Euler Tours, Hamilton Cycles and matchings in Graphs.
CO4	:Analyze the concept of edge colouring, independent sets and cliques in Graphs
CO5:	Explain the concept to fvertex colorings.

FORMAL LANGUAGES AND AUTOMATA THEORY

COs	On completion of this course, students will;
CO1	Differentiate deterministic and non deterministic finite automata.
CO2	Acquire the knowledge of regular sets and its properties.
CO3	Understand the concept of context free grammars and normal form.
CO4	Define context free languages and push down automata.
CO5	Explain about context free languages and push down automata.

ALGEBRAIC NUMBER THEORY

COs	**On completion of this course, students will;**
CO1	Demonstrate competence with the basic ideas of Diophantine and other linear equations
CO2	Solve some special equations of the type $x4+y4=z2$
CO3	Able to demonstrate infinite continued functions.
CO4	Appreciate the significance of approximating irrational numbers.
CO5	Acquired the knowledge of Unique factorizations.

NUMBER THEORY AND CRYPTOGRAPHY

COs	**On completion of this course, students will;**
CO1:	Explain the concept of congruence's and prove related results
CO2:	Discuss the properties of different arithmetical functions
CO3	Derive Euler's summation formula and estimate the average order of different arithmetical functions
CO4	Explain simple crypto systems and encipher matrices
CO5	Demonstrate public key cryptography

ANALYTIC NUMBER THEORY

COs	**On completion of this course, students will;**
CO1:	Study the basic concepts of elementary number theory
CO2	Explain several arithmetical functions and construct their relationships
CO3:	Apply algebraic structure in arithmetical functions
CO4:	Demonstrate various identities satisfied by arithmetical functions
CO5:	Determine the application to $\mu(n)$ & $\Lambda(n)$ and several equivalent form of prime number theorem

FUZZY SETS AND THEIR APPLICATIONS

COs	**On completion of this course, students will;**
CO1:	Understand the definition of Fuzzy sets and its related concepts
CO2:	Define Fuzzy Graphs and can explain the concepts
CO3	Explain the concepts in Fuzzy sets and its relations
CO4:	Discuss about Fuzzy logic
CO5:	Analyze the compositions of Fuzzy sets.

ADVANCED ALGEBRA

COs	**On completion of this course, students will;**
CO1:	Prove theorems applying algebra icway soft inking.
CO2:	Connect groups with graphs and understanding about Hamiltonian graphs.
CO3:	Compose clear and accurate proofs using the concepts of Galois Theory.
CO4:	Bring out insight in to Abstract Algebra with focus on axiomatic theories.
CO5:	Demonstrate knowledge and understanding of fundamental concepts including extension fields, Algebra ice tensions, Finite fields, Class equations and Sylow's theorem.

REAL ANALYSIS –II

COs	**On completion of this course, students will;**
CO1:	Understand and describe the basic concepts of Fourier series and Fourier integrals with respect to the orthogonal system.
CO2:	Analyze the representation and convergence problems of Fourier series.
CO3:	Analyze and evaluate the difference between transforms of various functions
CO4:	Formulate and evaluate complex contour integrals directly and by the fundamental theorem.
CO5:	Apply the Cauchy integral theorem in its various versions to compute contour integration.

PARTIAL DIFFERENTIAL EQUATIONS

COs	On completion of this course, students will;
CO1	To understand and classify second order equations and find general solutions.
CO2	To analyse and solve wave equations in different polar coordinates.
CO3	To solve Vibrating string problem, Heat conduction problem, to identify and solve Laplace and beam equations.
CO4	To apply maximum and minimum principle and solve Dirichlet, Neumann problems for various boundary conditions.
CO5	To apply Green's function and solve Dirichlet, Laplace problems, to apply Helmholtz operation and to solve Higher dimensional problem.

ALGEBRAIC TOPOLOGY

COs	On completion of this course, students will;
CO1	Give an account of the concepts homotopy, homology and co-homology, their basic properties and relationships.
CO2	:Prove topological results by using algebraic methods.
CO3	Use the theory to solve elementary topological problems.
CO4	Compute algebro-topological invariants in specific examples.
CO5	Explain the fundamental concepts of algebraic topology and their role in modern mathematics and applied contexts.

MATHEMATICAL STATISTICS

COs	On completion of this course, students will;
CO1	Discuss the sets, functions of sets, randing variables and certain expectations
CO2	Discuss binomial and related distributions.
CO3	To study various kinds of distributions.
CO4	Discuss additional distributions and order statistics and statistical applications.
CO5	To learn the convergence in distribution of a sequence of random variables.

TENSOR ANALYSIS AND RELATIVITY

COs	**On completion of this course, students will;**
CO1	Understand the system of different orders in Tenor Algebra.
CO2	Explain about Tensor Calculus in Riemann spaces.
CO3	Understand the concept of Covariant of differentiation and intrinsic differentiation
CO4	Explain about the theory of relativity and Doppler effect.
CO5	Analyze about the conservation of mass and energy.

WAVELETS

COs	On completion of this course, students will;
CO1	Determine integral wave let transform, Fourier and inverse Fourier Transformation
CO2	Explain the concepts of Fourier and Wavelet series and their properties.
CO3	Understand about the spline and interpolation formula.
CO4	Analyze about the multi resolution analysis.
CO5	Determine about computation of cardinal spline Wavelets

OPERATIONS RESEARCH

COs	On completion of this course, students will;
CO1	Be able to build and solve Transportation and Assignment problems using appropriate method.
CO2	Learn the constructions of network and optimal scheduling using CPM and PERT.
CO3	Ability to construct linear integer programming models and solve linear integer programming models using branch and bound method.
CO4	Understand the need of inventory management.
CO5	To understand basic characteristic features of a queuing system and acquire skills in analyzing queuing models.

NEURAL NETWORKS

COs	On completion of this course, students will;
CO1	Understand and analyze different neutron network models.
CO2	Understand the basic ideas behind most common learning algorithms for multilayer perceptions, radial basis function networks.
CO3	Describe Hebbrule and analyze back propagation algorithms with examples.
CO4	Study convergence and generalization and implement common learning algorithms.
CO5	Study directional derivatives and necessary conditions for optimality and to evaluate quadratic functions.

MATHEMATICAL DOCUMENTATION USING LaTex

COs	On completion of this course, students will;
CO1	To learn the latest techniques in Latex for the preparation of printable documents in an enhanced manner.
CO2	To avoid difficulty while typing a project or thesis comparing other mathematical software.
CO3	To write mathematical equations and to draw graphs using Latex
CO4	To fix foot notes and header
CO5	To create tables and type formulae in Mathematics.

COMPLEX ANALYSIS

COs	**On completion of this course, students will;**
CO1:	Analyze and evaluate local properties of analytical functions and definite integrals.
CO2:	Describe the concept of definite integral and harmonic functions.
CO3:	Demonstrate the concept of the general form of Cauchy's theorem.
CO4:	Develop Taylor and Laurent series.
CO5:	Explain the infinite products, canonical products and jensen's formula.

PROBABILITY THEORY

COs	On completion of this course, students will;
CO1	To define Random Events, Random Variables, to describe Probability, to apply Bayes, to define Distribution Function, to find Joint Distribution function, to find Marginal Distribution and Conditional Distribution function, to solve functions on random variables.
CO2	To define Expectation, Moments and Chebyshev Inequality, to solve Regression of the first and second types.
CO3	To define Characteristic functions, to define distribution function, to find probability generating functions, to solve problems applying characteristic functions
CO4	To define One point, two-point, Binomial distributions, to solve problems of Hypergeometric and Poisson distributions, to define Uniform, normal, gamma, Beta distributions, to solve problems on Cauchy and Laplace distributions.
CO5	To discuss Stochastic convergence, Bernaulli law of large numbers, to elaborate Convergence of sequence of distribution functions, to prove Levy-Cramer Theorems and de Moivre-Laplace Theorems, to explain Poisson, Chebyshev, Khintchine Weak law of large numbers, to explain and solve problems on Kolmogorov In equality and Kolmogorov Strong Law of large numbers.

TOPOLOGY

COs	On completion of this course, students will;
CO1	Define and illustrate the concept of topological spaces and the basic definitions of open sets, neighborhood, interior, exterior, closure and their axioms for defining topological space.
CO2	Understand continuity, compactness, connectedness, homeomorphism and topological properties.
CO3	Analyze and apply the topological concepts in Functional Analysis.
CO4	Ability to determine that a given point in a topological space is either a limit point or not for a given sub set of a topological space.
CO5	Develop qualitative tools to characterize connectedness, compactness, second countable, Hausdorff and develop tools to identify when two are equivalent (homeomorphic).

MECHANICS

COs	On completion of this course, students will;
CO1	Demonstrate the knowledge of core principles in mechanics.
CO2	Interpret and consider complex problems of classical dynamics in a systematic way.
CO3	Apply the variation principle for real physical situations.
CO4	Explore different applications of these concepts in the mechanical and electromagnetic fields.
CO5	Describe and apply the concept of Angular momentum, Kinetic energy and Moment of inertia of a particle

PROGRAMMING IN C++

COs	On completion of this course, students will;
CO1	Understanding about object oriented programming. Learn how to store one object inside another object.
CO2	Gain knowledge about the capability to store information together in an object.
CO3	Understand the capability of a class to rely upon another class. Learn use of one method can be used in variety of different ways
CO4	Understanding the process of exposing the essential data to the outside of the world and hiding the low level data. Create and process data in files using file I/O functions
CO5	Understand about constructors which are special type of functions. Discuss to know about writing style.

MATHEMATICAL PYTHON-THEORY

COs	On completion of this course, students will;
CO1	Give mathematical model for real world problems
CO2	Design algorithms for mathematical models, analyse the efficiency and correctness of algorithms.
CO3	Design implementable programs in Python.
CO4	Define and demonstrate the use of functions and looping using Python.
CO5	Design and implement a program to solve a real-world problem.

STOCHASTIC PROCESS

COs	On completion of this course, students will;
CO1	Define Marko chain and Transition probability matrix.
CO2	Understand the concepts of queuing models and limit theorems on Marko chains.
CO3	Explain about the pure birth, death processes and Poisson process.
CO4	Acquire the knowledge of some special Renewal processes.
CO5	Describe the joint probabilities for Brownian motion

.

FUNCTIONAL ANALYSIS

COs	**On completion of this course, students will;**
CO1:	Understand the Banach spaces and Transformations on Banach Spaces.
CO2:	Prove Hahn Banach theorem and open mapping theorem.
CO3:	Describe operators and fundamental theorems.
CO4:	Validate orthogonal and ortho normal sets.
CO5:	Analyze and establish the regular and singular elements.

DIFFERENTIAL GEOMETRY

COs	**On completion of this course, students will;**
CO1	Explain space curves, Curves between surfaces, metrics on a surface, fundamental form of a surface and Geodesics.
CO2	Evaluate the concepts with related examples.
CO3	Compose problems on geodesics.
CO4	Recognize applicability of develop able.
CO5	Construct and analyze the problems on curvature and minimal surfaces.

PROGRAMMING IN C++ PRACTICAL

COs	**On completion of this course, students will;**
CO1:	Understanding about object oriented programming. Learn how to store one object inside another object.
CO2:	Gain knowledge about the capability to store information together in an object.
CO3:	Understand the capability of a class to rely upon another class. Learn use of one method can be used in variety of different ways.
CO4:	Understanding the process of exposing the essential data to the outside of the world and hiding the low level data. Create and process data in files using file I/O functions.
CO5:	Understand about constructors which are special type of functions. Discuss to know about writing style

MATHEMATICAL PYTHON-PRACTICAL

COs	On completion of this course, students will;
CO1	Write programs using advanced concepts of Python.
CO2	Write, Test and Debug Python Programs.
CO3	Implement Conditionals and Loops for Python Programs.
CO4	Use functions and represent Compound data using Lists, Tuples and Dictionaries.
CO5	Read, write and manipulate data from & to files in Python.

RESEARCH METHODOLOGY

COs	**On completion of this course, students will;**
CO1	Discuss to know about writing style
CO2	Discuss the Tips and Strategies
CO3	To know about the research project
CO4	Discuss the different components of Research Project
CO5	To learn the Publication and presentation of research articles and Tool kits.

4. M. SC CHEMISTRY

Programme Outcomes (POs)

PO1	**Problem Solving Skill** Apply knowledge of Management theories and Human Resource practices to solve business problems through research in Global context.
PO2	**Decision Making Skill** Foster analytical and critical thinking abilities for data-based decision-making.
PO3	**Ethical Value Ability** to incorporate quality, ethical and legal value-based perspectives to all organizational activities.
PO4	**Communication Skill** Ability to develop communication, managerial and interpersonal skills.
PO5	**Individual and Team Leadership Skill** Capability to lead themselves and the team to achieve organizational goals.
PO6	**Employability Skill** Inculcate contemporary business practices to enhance employability skills in the competitive environment.
PO7	**Entrepreneurial Skill** Equip with skills and competencies to become an entrepreneur.
PO8	**Contribution to Society** Succeed in career endeavors and contribute significantly to society.
PO9	**Multicultural competence** Possess knowledge of the values and beliefs of multiple cultures and a global perspective.
PO10	**Moral and ethical awareness/reasoning** Ability to embrace moral/ethical values in conducting one's life.

Programme Specific Outcomes (PSOs)

PSO1	**Placement** Prepare the students who will demonstrate respectful engagement with others' ideas, behaviors, beliefs and apply diverse frames of reference to decisions and actions.
PSO2	**Entrepreneur** Create effective entrepreneurs by enhancing their critical thinking, problem solving, decision making and leadership skill that will facilitate startups and high potential organizations.
PSO3	**Research and Development** Design and implement HR systems and practices grounded in research that comply with employment laws, leading the organization towards growth and development.
PSO4	**Contribution to Business** World Produce employable, ethical and innovative professionals to sustain in the dynamic business world.
PSO5	**Contribution to the Society** Contribute to the development of the society by collaborating with stakeholders for mutual benefit.

PHYSICAL CHEMISTRY

COs	On completion of this course, students will;
CO1	To explain the basic separation procedures of organic mixtures.
CO2	To select the separation methods to separate the organic mixtures.
CO3	To classify the functional groups using systematic procedure.
CO4	To determine the physical properties of organic compounds.
CO5	To analyze the separated organic components systematically and derivative them suitably.

PHYSICAL CHEMISTRY PRACTICAL

COs	On completion of this course, students will;
CO1	To identify the suitable drugs for various diseases.
CO2	To apply the principles of various drug action and drug design.
CO3	To acquire the knowledge on product development based on SAR.
CO4	To apply the knowledge on applications of computers in chemistry.
CO5	To synthesize new drugs after understanding the concepts SAR.

NANO MATERIALS AND NANO TECHNOLOGY

COs	On completion of this course, students will;
CO1	To explain methods of fabricating nanostructures.
CO2	To relate the unique properties of nano materials to reduce dimensionality of the material.
CO3	To describe tools for properties of nanostructures.
CO4	To discuss applications of nano materials.
CO5	To understand the health and safety related to nano material.

ORGANIC REACTION MECHANISM

COs	**On completion of this course, students will;**
CO1:	To recall the basic principles of organic chemistry.
CO2:	To understand the formation and detection of reaction intermediates of organic reactions.
CO3:	To predict the reaction mechanism of organic reactions and stereochemistry of organic compounds.
CO4:	To apply the principles of kinetic and non-kinetic methods to determine the mechanism of reactions.
CO5:	To design and synthesize new organic compounds by correlating the stereochemistry of organic compounds.

STRUCTURE AND BONDING IN INORGANIC COMPOUNDS

COs	**On completion of this course, students will;**
CO1:	To predict the geometry of main group compounds and clusters.
CO2:	To explain about the packing of ions in crystals and apply the radius ratio rule to predict the coordination number of cations.
CO3:	To understand the various types of ionic crystal systems and analyze their structural features.
CO4:	To explain the crystal growth methods.
CO5:	To understand the various types of defects in crystals.

ORGANIC CHEMISTRY PRACTICAL-I

COs	**On completion of this course, students will;**
CO1:	To explain the basic separation procedures of organic mixtures.
CO2:	To select the separation methods to separate the organic mixtures.
CO3:	To classify the functional groups using systematic procedure.
CO4:	To determine the physical properties of organic compounds.
CO5:	To analyze the separated organic components systematically and derivative them suitably.

5. M.SC., ZOOLOGY

Programme Outcomes (POs)

PO1:	**Problem Solving Skill:** Apply knowledge of Management theories and Human Resource practices to solve business problems through research in Global context.
PO2:	**Decision Making Skill:** Foster analytical and critical thinking abilities for data-based decision-making.
PO3:	**Ethical Value :** Ability to incorporate quality, ethical and legal value-based perspectives to all organizational activities.
PO4:	**Communication Skill:** Ability to develop communication, managerial and interpersonal skills.
PO5:	**Individual and Team Leadership Skill:** Capability to lead themselves and the team to achieve organizational goals.
PO6:	**Employability Skill :** Inculcate contemporary business practices to enhance employability skills in the competitive environment.
PO7:	**Entrepreneurial Skill:** Equip with skills and competencies to become an entrepreneur.
PO8:	**Contribution to Society:** Succeed in career endeavors and contribute significantly to society.
PO 9	**Multicultural competence:** Possess knowledge of the values and beliefs of multiple cultures and a global perspective.
PO 10:	**Moral and ethical awareness/reasoning:** Ability to embrace moral/ethical values in conducting one's life.

Programme Specific Outcomes (PSOs)

PSO1	**Placement:** To prepare the students who will demonstrate respectful engagement with others' ideas, behaviors, beliefs and apply diverse frames of reference to decisions and actions.
PSO2	**Entrepreneur:** To create effective entrepreneurs by enhancing their critical thinking, problem solving, decision making and leadership skill that will facilitate startups and high potential organizations.
PSO3	**Research and Development:** Design and implement HR systems and practices grounded in research that comply with employment laws, leading the organization towards growth and development.
PSO4	**Contribution to Business World:** To produce employable, ethical and innovative professionals to sustain in the dynamic business world.

STRUCTURE AND FUNCTION OF INVERTEBRATES

COs	On the successful completion of the course, student will be able to:
CO1	Remember the general concepts and major groups in animal classification, origin, structure, functions and distribution of life in all its forms. K1 & K2
CO2	Understand the evolutionary process. All are linked in a sequence of life patterns. K2 & K4
CO3	Apply this for pre-professional work in agriculture and conservation of life forms. K3 & K5
CO4	Analyze what lies beyond our present knowledge of life process. K4 & K6
CO5	Evaluate and to create the perfect phylogenetic relationship in classification. K5 & K6

K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 – Create

COMPARATIVE ANATOMY OF VERTEBRATES

COs	On the successful completion of the course, student will be able to:
CO1	Remember the general concepts and major groups in animal classification, origin, structure, functions and distribution of life in all its forms. K1 & K2
CO2	Understand the evolutionary process. All are linked in a sequence of life patterns. K2 & K4
CO3	Apply this for pre-professional work in agriculture and conservation of life forms. K3 & K5
CO4	Analyze what lies beyond our present knowledge of life process. K4 & K6
CO5	Evaluate and to create the perfect phylogenetic relationship in classification. K5 & K6

K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 – Create

LAB COURSE IN INVERTEBRATES & VERTEBRATES

COs	On the successful completion of the course, student will be able to:
CO1	Understand the structure and functions of various systems in animals K2 & K4
CO2	Learn the adaptive features of different groups of animals K1 & K2
CO3	Learn the mounting techniques K2 & K3
CO4	Acquire strong knowledge on the animal skeletal system K2 & K4

K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 – Create

CELLULAR AND MOLECULAR BIOLOGY

COs	On the successful completion of the course, student will be able to:
CO1	Understand the general concepts of cell and molecular biology. K2
CO2	Visualize the basic molecular processes in prokaryotic and eukaryotic cells, especially relevance of molecular and cellular structures influencing functional features. K1 & K2
CO3	Perceive the importance of physical and chemical signals at the molecular level resulting in modulation of response of cellular responses. K3 & K4
CO4	Updated the knowledge on the rapid advances in cell and molecular biology for a better understanding of onset of various diseases including cancer. K5
CO5	Understand the general concepts of cell and molecular biology. K2

K1- Remember; K2- Understand; K3- Apply; K4-Analyze; K5-Evaluate; K6-Create

DEVELOPMENTAL BIOLOGY

COs	On the successful completion of the course, student will be able to:
CO1	Define the concepts of embryonic development K1
CO2	Observe various stages of cell divisions under microscope K2 & K3
CO3	Understand the formation of zygote K4
CO4	Differentiate the blastula and gastrula stages K4 & K5
CO5	Learn the distinguishing features of three different germ layers and formation of various tissues and organs

K1- Remember; K2- Understand; K3- Apply; K4-Analyze; K5-Evaluate; K6-Create

LAB COURSE IN CELL BIOLOGY AND DEVELOPMENTAL BIOLOGY

COs	**On the successful completion of the course, student will be able to:**
CO1	Acquire knowledge to differentiate the cells of various living organisms and become awares of physiological processes of cells e.g. cell divisions, various stages of fertilization and embryo development. K2
CO2	Understand and observe as well as correctly identify different cell types, cellular structures using different microscopic techniques. K3
CO3	Develop handling - skills through the wet-lab course. K6
CO4	Learn the method of culturing of *Drosophila* and identification of their wild and mutant strains K1 & K2
CO5	Acquire skills to perform human karyotyping and chromosome mapping to identify abnormalities K1 & K2

K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 – Create

MOLECULES AND THEIR INTERACTION RELEVANT TO BIOLOGY

COs	On the successful completion of the course, student will be able to:
CO1	Learn the structure properties metabolism and bioenergetics of Bio-molecules K1 & K3
CO2	Acquire knowledge on various classes and major types of enzymes classification their mechanism of action and regulation K1 & K2
CO3	Understand the fundamentals of biophysical chemistry and biochemistry importance and applications of methods in conforming the structure of biopolymers K2 & K3
CO4	Comprehend the structural organization of and proteins Carbohydrates nucleic acids and lipids K2 & K4
CO5	Familiarize the use of methods for the identification Characterization and conformation of biopolymer structures. K5& K6

K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 – Create

BIOSTATISTICS

COs	On the successful completion of the course, student will be able to:
CO1	Clear understanding of design and application of biostatistics relevant to experimental and population studies. K2 & K3
CO2	Acquired skills to perform various statistical analyses using modern statistical techniques and software. K3 & K4
CO3	Knowledge on the merits and limitation of practical problems in biological/ health management study as well as to propose and implement appropriate statistical design/ methods of analysis. K5 & K6

K1- Remember; K2- Understand; K3- Apply; K4-Analyze; K5-Evaluate; K6-Create

ECONOMIC ENTOMOLOGY

COs	On the successful completion of the course, student will be able to:
CO1	Understand taxonomy, classification, and life of insects in the animal kingdom. K1 & K2
CO2	Know the life cycle, rearing and management of diseases of beneficial insects. K2 & K3
CO3	Know the type of harmful insects, life cycle, damage potential and management of pests including natural pest control K2 & K3
CO4	Recognize insects which act as vectors causing diseases in animals and human. K2 & K4
CO5	Overall understanding on the importance of insects in human life. K2 & K6

K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 –Create

RESEARCH METHODOLOGY

COs	On the successful completion of the course, student will be able to:
CO1	Understand the implications of GLP K1
CO2	Learn the working principles of different instruments K2
CO3	Gain the knowledge on techniques of histology and histochemistry K2 & K4
CO4	Acquire knowledge on the basic principle and application of various modules of light and electron microscopy K3 & K5

K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6- Create

POULTRY FARMING

COs	Upon completion of this course, Students would have
CO1	To understand the various practices in Poultry farming. To know the needs for Poultry farming and the status of India in global market. K2 & K3
CO2	To be able to apply the techniques and practices needed or Poultry farming. K1, K2 & K3
CO3	To know the difficulties in Poultry farming and be able to propose plans against it. K5 & K6

K1- Remember; K2- Understand; K3- Apply; K4-Analyze; K5-Evaluate; K6-Create

1. M. PHIL - ECONOMICS

Course Outcomes

- To prepare the students to identify the research issues in economics especially in the thrust areas.
- To inculcate the research aptitude among the students.
- To understand the significance and the methodology of research with the application of statistics and Mathematics for economic model building with view to suggesting policies.

2. M.PHIL ENGLISH

Programme Outcomes:

POs	At the end of the programme, the students will be able to:
PO1	Comprehend the significance of literary works in their social, cultural and ideological contexts.
PO2	Discover the incredible diversity of the English Language and Literature throughout the history of the world
PO3	Ascertain how writers have reacted to the social developments of their contemporary period and produced a text
PO4	Express the hermeneutic engagement of creative texts with gender, race, region and identity across various significations.
PO5	problematise contemporary Literature and cultures with a nationalist perspective
PO6	Develop comprehensive reading, writing, and research skills of a high order
PO7	undertake academic and literary professions.
PO8	Adapt themselves to the changing aspects of academic and creative professionalism.

Programme Specific Outcomes:

PSOs	**Upon completion of the M.Phil English Literature Programme, students will be able to:**
PSO1	Locate the historicity and textuality of World Anglophone Literatures.
PSO2	Appraise the diversity of humanist discourses delineated in the texts
PSO3	Relate the texts to convey and construct cultural values and ideas
PSO4	Foster and articulate universalism with social empathy
PSO5	Respond positively to the significant paradigm shift
PSO6	Validate the texts with dominant critical theories, methodologies, and contemporary tactics in the field.
PSO7	Develop proficiency in critical thought and academic writing.
PSO8	Acquire professional skills related to translation and media studies

Course Outcomes:

COs	Upon the completion of this course, students will be able to	Cognitive Level
CO1	Demonstrate the ability to indicate methods proper to research aims and objectives	K3,K6
CO2	Spell the description and the process of research	K1,K3
CO3	Identify are search problem and proceed with it.	K4,K5
CO4	Develop innovative critical thinking skills.	K3,K6
CO5	Trace the consciousness of ethical issues in educational research.	K5
CO6	Determine improved writing skills	K6

Course Outcomes:

COs	Upon the completion of this course, students will be able to	Cognitive Level
CO1	Identify the key concepts of Contemporary Literature	K1
CO2	Infer the common themes dealt by the Contemporary Literature	K2
CO3	Analyse the origin of post-colonial theories	K3
CO4	Categorise selected texts for their literary value and cultural importance.	K4
CO5	Disseminate the significance of Language, Literature and Hybridity in Contemporary Period	K5
CO6	Overcome the assimilatory practices of the cultural, historical, and economic processes of Contemporary Literature	K6

3. M. PHIL - MATHEMATICS

Course Outcomes

- To develop a strong base in theoretical mathematics such as Advanced Algebra, Advanced Analysis, Functional Analysis.
- Enables the students to obtain advanced knowledge in a specialized field.
- Communicate mathematical ideas, results, context and background effectively and professionally in written and oral form.
- Students will able to produce and defined an original contribution to knowledge as evidenced by the writing and defense of a thesis involving significant original research.

4. M. PHIL-CHEMISTRY

Course Outcomes

- After studying the M.Phil. program, the students will be able to
- Introduce the purpose and importance of research for future development.
- Know the different types of literature search and indexes.
- Understand the error analysis, correlation methods and computer application.
- Enrich the knowledge in various types of spectral techniques and scientific analysis.
- Develop their skills for carryout the project.
- Make awareness in social and industrial relevant issues.
- Expose to present their findings in national and international seminars and conferences.
- Qualify as Chemist/Scientist in various industries and research institutions.

5. M. PHIL., ZOOLOGY

RESEARCH AND TEACHING METHODOLOGY

Objective:

To provide in-depth Knowledge on methods involved in preparation of working solutions, quantitative and also on the working principles of equipments involved in research and teaching pattern.

COs	Upon the completion of this course, students will be able to
CO1	Know to significance and preparation protocol of solution and buffers for research work.
CO2	Learn to know the principle and functions of advanced biological instruments and their applications.
CO3	Acquired Knowledge on the histopathological and histochemcical techniques.
CO4	know the quantitative and qualitative estimation of biological macro and micro molecules.
CO5	Learn to handle the computer aided statistical software packages.
CO6	Enable to familiarize the methods of thesis writing and project proposal preparation.
CO7	Inculcate the knowledge on the teaching and learning methods.

ANIMAL BIODIVERSITY

Objective:

To provide knowledge on animal diversity, its significance in natural environmental and conservation strategies.

COs	**Upon the completion of this course, students will be able to**
CO1	Understand the ecosystem, diversity of organisms and their ecological relationship.
CO2	Know the genetic relationship of an animal's their distribution and biological hotspot areas.
CO3	Realize the importance of animal classification and taxonomy; species concept and their evolutionary significance.
CO4	Inculcate conservation strategies of ecosystem and various enactments relating to conservation policy at national and international status.
CO5	Learn the measurement of biodiversity richness, species evenness and geometric analysis.

ANIMAL HEALTH

Objective:

To provide knowledge on animal health, disease control, and related farm management practices.

COs	**Upon the completion of this course, students will be able to**
CO1	Know the importance of animal nutrition, nutritional deficiency diseases and feed management.
CO2	Learn the control and management of zoonotic organisms.
CO3	Know the cattle/livestock management practices.

APPLIED ZOOLOGY

Course Objective:

To provide knowledge on vermiculture techniques, harmful insects related to agriculture, infectious and communicable diseases, live stocks diseases and farming also on the significance and economic importance of sericulture and apiculture.

COs	**Upon the completion of this course, students will be able to**
CO1:	Know the importance of productive insects and their conservation strategies.
CO2:	Learn the management and control of causative agents.

DOCTOR OF PHILOSOPHY (PH. D - ECONOMICS)

Course Outcomes

- Develop and deepen the current and advanced knowledge in the field with original thought and/or research and come up with innovative definitions based on Master's degree qualifications.
- Conceive the interdisciplinary interaction which the field is related with, come up with original solutions by using knowledge requiring proficiency on analysis, synthesis and assessment of new and complex ideas.
- Evaluate and use new information within the field in a systematic approach.
- Develop an innovative knowledge, method, design and/or practice or adapt an already known knowledge, method, design and/or practice to another field; research, conceive, design, adapt and implement an original subject.
- Critical analysis, synthesis and evaluation of new and complex ideas.
- Gain advanced level skills in the use of research methods in the field of study.
- Contribute the progression in the field by producing an innovative idea, skill, design and/or practice or by adapting an already known idea, skill, design, and/or practice to a different field independently.
- Broaden the borders of the knowledge in the field by producing or interpreting an original work or publishing at least one scientific paper in the field in national and/or international refereed journals.
- Demonstrate leadership in contexts requiring innovative and interdisciplinary problem solving.
- Develop new ideas and methods in the field by using high level mental processes such as creative and critical thinking, problem solving and decision making.
- Investigate and improve social connections and their conducting norms and manage the actions to change them when necessary.

- Defend original views when exchanging ideas in the field with professionals and communicate effectively by showing competence in the field.
- Contribute to the transition of the community to an information society and its sustainability process by introducing scientific, technological, social or cultural improvements.
- Demonstrate functional interaction by using strategic decision making processes in solving problems encountered in the field.
- Contribute to the solution finding process regarding social, scientific, cultural and ethical problems in the field and support the development of these values.

DOCTOR OF PHILOSOPHY (PH. D - ENGLISH)

Course Outcomes

- To enable the scholars to have a focused study on the chosen literary works.
- To guide the scholars through various course work assigned to them.
- To guide the scholars to publish articles in various journals as part of their research work.

DOCTOR OF PHILOSOPHY (PH. D - MATHAMATICS)

Course Outcomes

- To enable the scholars to have a focused study on the mathematical analysis.
- To guide the scholars through various course work assigned to them.
- To guide the scholars to publish articles in various journals as part of their research work.

DOCTOR OF PHILOSOPHY (PH. D-CHEMISTRY)

Course Outcomes

- To have a deep working knowledge of the principles, techniques, and concepts of contemporary chemistry.
- To be able to effectively design and carry out independent research leading to new knowledge.
- To be able to communicate clearly and effectively within and across disciplinary lines.
- To be able to educate students interested in chemical sciences.
- To be aware of and prepare for various career opportunities with an advanced degree in chemistry.
- To clearly understand the ethical conduct of research.
- To understand and adopt the best safety practices in chemical research.

DOCTOR OF PHILOSOPHY (PH. D-ZOOLOGY)

Course outcomes

- To impart specific research skills that underpins the various branches of the science of Zoology.
- To enable the deep research knowledge to understanding and knowledge of vast areas of Zoology.
- To make the research scholars to develop the knowledge regarding cellular, biochemical, biophysical and organs level.
- To facilitate the research scholars get the job offer from various college lecturer and researcher at scientist level in national and international level institutes.
- To apply the in depth practical skills with appropriate statistical to prove for societal importance for betterment of human being.
- To create and give suggestion to people or government authorities via research publication and conference presentation.

ADD ON COURSES

CAREER ORIENTED COURSES

CERTIFICATE COURSE IN SOIL SCIENCE AND AGRICULTURE CHEMISTRY (for I B. Sc Chemistry)

Outcomes

- Comprehensive knowledge on rocks and minerals, their composition and the types of soils formed from different parent materials.
- Imparts knowledge on essential nutrients, soil fertility, nutrient transformations, Manures and fertilizers in soil.
- Understand various soil physical, chemical and biological properties and their impact on plant growth.
- The knowledge gained in this course will be useful in understanding the behavior of soils in crop production and management.

DIPLOMA COURSE IN SOIL SCIENCE AND AGRICULTURE CHEMISTRY

(for II B. Sc Chemistry)

Course Outcomes

- Students will gain knowledge on concepts and principles of Soil Science.
- This course will impart knowledge on the concepts and methods of soil resource inventory.
- Students will understand on soil quality and health, Distribution of Waste land and problematic soils and their reclamation in Tamil Nadu
- The knowledge gained in this course will be useful in understanding the behavior of soils in crop production and management.

CERTIFICATE COURSE IN GANDHIAN THOUGHT

Course Outcome

- Mahatma Gandhi and his principles have great relevance in this era of Globalization.
- Violent conflict and instability disrupt markets and societies.
- A peaceful environment is a pre requisite for successful business.
- Inclusive Growth is necessary for sustainable development. This course is designed to inculcate strong values in students and sensitize the youth to the problems of the marginalized.
- It aims at training the students in the art of participatory management and peaceful methods of conflict resolution.
- Through an interesting and well-planned mix of lectures, presentations, skits, films, social outreach programs and other activities it aims at developing the overall personality of students by helping them discover their latent talents and instilling leadership qualities.
- True education is not just coming out with a degree.
- It is how you change and what your values are when you finish. Peace is definitely good business and efforts to promote it certainly makes good business sense.
- With increasing number of Companies going in for Corporate Social Responsibility students who have completed this Course will definitely have an edge over others as the job market may prefer those who have executed some social sector responsibilities in addition to academics.

DIPLOMA COURSE IN GANDHIAN THOUGHT

Course Outcomes

- Mahatma Gandhi and his principles have great relevance in this era of Globalization.
- Violent conflict and instability disrupt markets and societies. A peaceful environment is a pre requisite for successful business. Inclusive Growth is necessary for sustainable development.
- This course is designed to inculcate strong values in students and sensitize the youth to the problems of the marginalized.
- It aims at training the students in the art of participatory management and peaceful methods of conflict resolution.
- Through an interesting and well-planned mix of lectures, presentations, skits, films, social outreach programs and other activities it aims at developing the overall personality of students by helping them discover their latent talents and instilling leadership qualities.
- True education is not just coming out with a degree. It is how you change and what your values are when you finish.
- Peace is definitely good business and efforts to promote it certainly makes good business sense.
- With increasing number of Companies going in for Corporate Social Responsibility students who have completed this Course will definitely have an edge over others as the job market may prefer those who have executed some social sector responsibilities in addition to academics.

CERTIFICATE COURSE IN SALESMANSHIP

Course Outcomes

- To familiarize the students regarding various dimensions of salesmanship and career opportunities available in these fields.
- To familiarize the students in understanding the basic psychology of the customer and pitch the sales accordingly.
- To develop practical understanding among the students associated with salesmanship through classroom discussion/ participation and projects.
- To develop transferrable skills among the students for managing sales operation efficiently so that they could be ready to join the sales functions in any organization.
- To provide knowledge to students in concise and understandable format so that students could learn and apply these concepts in their career for the growth.
- To provide brief insight about personal selling and its stages, meaning and importance of knowledge of industry and company product and customers and other key dimensions of sales management like sales organization, motivation and compensation.