Programme curriculum map

Outcomes	Paper code	Paper	Delivery pattern
✓ Understand whole about human anatomy and physiology including embryology. ✓ Understand different anatomical structures and systems.	GEC1 GA03	General Anatomy & Physiology	First semester
✓ Understand about light and its theories ✓ Understand the significant of light and properties of light. ✓ Study and understand the phenomena of Interference, Diffraction and Polarization and understand its concepts with its types ✓ Understand the principles of LASERS and basic principles.	SDC1P O01	Physical Optics	First semester
✓ Understand the basic microorganisms and its types ✓ Understand the difference between Micro organisms and Human ✓ Study and understand ocular bacteriology ✓ Understand the concept of virology	SDC1 MP02	Microbiology & Pharmacology	First semester
✓ Understand the coats of the eye ball ✓ Understand the anatomy and physiology of whole ocular structures.	GEC2 OA06	Ocular Anatomy & Physiology	Second semester
✓ Understand the light and its natures ✓ Understand the principle related with the phenomena reflection and refraction ✓ Understand detail about thin and thick lenses ✓ Learn about optical fibers and uses	SDC2 GO5	Geometrical Optics	Second semester
✓ Understand the structure and function of biomolecules and their significance ✓ Know the importance of enzymes and vitamins ✓ Application of biochemistry in various field	SDC2B C06	Biochemistry	Second semester
✓ Study detail about diseases ocular structures-symptoms, signs, diagnosis and treatment modalities. ✓ Study detail about arterial and venal diseases.	GECO D08	Ocular Disease	Third semester

✓ Study details about glaucoma and its types and diagnosis			
✓ Discussion and review of geometrical optics ✓ Understand the optics of ocular structures ✓ Understand the measurement of optical constants of the eye ✓ Understand visual acuity, light and dark adaptations, colour vision and contrast sensitivity and acquire them to evaluate each one. ✓ Study the refractive anomalies and their causes	GEC3 CR09	Clinical Refraction	Third semester
✓ Understand the concept of general pathology ✓ Study and understand the pathology of ocular structures and sources of infections	SDC3P I09	Pathology & Immunology	Third semester
✓ Brief analysis of the technique of instruments in ophthalmic area ✓ Study the technique of Vision charts, Trail sets,Retinoscope,Telescope,AR,Ophthalmoscope,slit lamp,synaptophore & other devices.	SDC3 OI10	Ophthalmic Instrumentation & procedure	Third semester
✓ Understand the concept of public health ✓ Study the principles of primary, secondary and tertiary care ✓ Understand the global blindness and councils for that. ✓ Study about ocular emergencies.	GEC4 CO12	Community Optometry	Fourth Semester
✓ Understand refractive conditions and its anomalies ✓ Study and understand the concept of Accommodation and Convergence	GEC4 VO13	Visual Optics	Fourth semester

✓ Study the different refraction methods			
✓ Understand the types and characteristics of spectacle lenses. ✓ Study the materials using for spectacle lenses. ✓ Study the types of lenses and ophthalmic lens coatings. ✓ Understand and acquire the basic of dispensing ✓ Acquire the students to selection of lenses and frames according to patient's need and for better vision.	SDC4 DO14	Dispensing Optics	Fourth semester
✓ Study and understand the structural morphological changes of eye in elder stage ✓ Study the common ocular diseases in old eye ✓ Study detail about pediatric eye diseases and disorders along its assessments	SDC5 GP17	Geriatric & Pediatric Optometry	Fifth Semester
✓ Study detail about contact lens history and development ✓ Study the instrumentation in contact lens clinic ✓ Understand the classification and terminology of contact lenses ✓ Acquire the student to insertion, evaluation and removal of contact lens.	SDC5C L18	Contact Lens	Fifth Semester
✓ Understand the concept of cyclopean eye and BSV. ✓ Study detail about strabismus- classification, clinical features, investigation and its management	SDC5B V19	Binocular vision	Fifth Semester
✓ Understand the definition and optics of low vision	SDC5L V20	Low Vision Aid & Visual	Fifth Semester

✓ Acquire the students to assess the low vision and its rehabilitation		Rehabilitation	
✓ Train the students to behave a patient ✓ Acquire the students to do whole optometric procedures	SDC6INT23(Pr)	Major Internship	Sixth Semester

SEMESTER I

Course Code: CHE1B01

Course outcome (s)	
CO1	To apply the methods of a research project.
CO2	To understand the principles behind volumetry.
CO3	To analyse the characteristics of different elements.
CO4	To distinguish between different acid base concepts.
CO5	To analyse the stability of different nuclei.

Core Course I: Theoretical and Inorganic Chemistry- I

SEMESTER II

Course Code: CHE2B02

Core Course II: Theoretical and Inorganic Chemistry- II

Course outcome (s)	
CO1	To understand the importance and the impact of quantum revolution in science.
CO2	To understand and apply the concept that the wave functions of hydrogen atom are nothing but atomic orbitals.
CO3	To understand that chemical bonding is the mixing of wave functions of the two combining atoms.
CO4	To understand the concept of hybridization as linear combination of orbitals of the same atom.

CO5	To inculcate an atomic/molecular level philosophy in the mind.

SEMESTER III

Course Code: CHE3B03

Core Course III: PHYSICAL CHEMISTRY - I

Course outcome (s)	
CO1	To understand the properties of gaseous state and how it links to thermodynamic systems.
CO2	To understand the concepts of thermodynamics and it's relation to statistical thermodynamics.
CO3	To apply symmetry operations to categorize different molecules.

SEMESTER IV

Course Code: CHE4B04

Core Course IV: ORGANIC CHEMISTRY– I

Course outcome (s)	
CO1	To apply the concept of stereochemistry to different compounds.
CO2	To understand the basic concepts of reaction mechanism.
CO3	To analyse the mechanism of a chemical reaction.
CO4	To analyse the stability of different aromatic systems.

SEMESTER IV

Course Code: CHE4B05(P)

Core Course V: INORGANIC CHEMISTRY PRACTICAL – I

Course outcome (s)

CO1	To enable the students to develop skills in quatitative analysis and preparing inorganic complexes.
CO2	To understand the principles behind quantitative analysis.
CO3	To apply appropriate techniques of volumetric quantitative analysis in estimations.
CO4	To analyse the strength of different solutions.

SEMESTER V

Course Code: CHE5B06

Core Course VI: INORGANIC CHEMISTRY – III

Course outcome (s)	
CO1	To understand the principles behind quanlitative and quantitative analysis.
CO2	To understand basic processes of metallurgy and to analyse the merits of different alloys.
CO3	To understand the applications of different inorganic polymers.
CO4	To analyse different polluting agents.
CO5	To apply the principles of solid waste management.

SEMESTER V

Course Code: CHE5B07

Core Course VII: ORGANIC CHEMISTRY – II

Course outcome (s)	
CO1	To understand the difference between alcohols and phenols.
CO2	To understand the importance of ethers and epoxides.
CO3	To apply organometallic compounds in the preparation of different functional groups.

CO4	To apply different reagents for the inter conversion of aldehydes, carboxylic acids and acid derivatives.
CO5	To apply active methylene compounds in organic preparations.

SEMESTER V

Course Code: CHE5B08

Core Course VIII: PHYSICAL CHEMISTRY – II

Course outcome (s)	
CO1	To apply the concept of kinetics, catalysis and photochemistry to various chemical and physical processes.
CO2	To characterise different molecules using spectral methods.
CO3	To understand various phase transitions and its applications.

SEMESTER VI

Course Code: CHE6B09

Core Course IX: INORGANIC CHEMISTRY – IV

Course outcome (s)	
CO1	To understand the principles behind different instrumental methods.
CO2	To distinguish between lanthanides and actinides.
CO3	To appreciate the importance of CFT.
CO4	To understand the importance of metals in living systems.
CO5	To distinguish geometries of coordination compounds.

SEMESTER VI

Course Code: CHE6B10

Core Course X: ORGANIC CHEMISTRY – III

Course outcome (s)	
CO1	To elucidate the structure of simple organic compounds using spectral

	techniques.
CO2	To understand the basic structure and tests for carbohydrates.
CO3	To understand the basic components and importance of DNA.
CO4	To understand the basic structure and applications of alkaloids and terpenes.
CO5	To distinguish different pericyclic reactions.

SEMESTER VI

Course Code: CHE6B11

Core Course XI: PHYSICAL CHEMISTRY – III

Course outcome (s)	
CO1	To understand the basic concepts of electrochemistry.
CO2	To understand the importance of colligative properties.
CO3	To relate the properties of materials/solids to the geometrical properties and chemical compositions.

SEMESTER VI

Course Code: CHE6B12

Core Course XII: Advanced and Applied Chemistry

Course outcome (s)	
CO1	To understand the importance of nanomaterials.
CO2	To appreciate the importance of green approach in chemistry.
CO3	To understand the uses and importance of computational calculations in molecular design.
CO4	To understand the role of chemistry in human happiness index and life expectancy.

SEMESTER VI

Course Code: CHE6B13(E1)

Core Course XIII: Elective 1. INDUSTRIAL CHEMISTRY

Course outcome (s)	
CO1	To understand the importance of petrochemicals.
CO2	To appreciate the importance and to familiarise the opportunities of pharmaceutical, leather and sugar industries.
CO3	To analyse the role of catalysts in industrial processes.

SEMESTER VI

Course Code: CHE6B13(E2)

Core Course XIII: Elective 2. POLYMER CHEMISTRY

Course outcome (s)	
CO1	To understand various classification of polymers and types of polymerisation methods.
CO2	To understand the important characteristics of polymers such as average molecular weight, glass transition temperature, viscoelasticity and degradation.
CO3	To appreciate the importance of processing techniques.
CO4	To characterise different commercial polymers and to understand the significance of recycling.

SEMESTER VI

Course Code: CHE6B13(E3)

Core Course XIII: Elective 3. MEDICINAL AND ENVIRONMENTAL CHEMISTRY

Course outcome (s)	
CO1	To understand the importance of drugs in human health.
CO2	To understand the facts about common diseases and treatment.
CO3	To identify the presence of toxic substances in atmosphere.

CO4	To apply chemistry in treatment of water and sewage.

SEMESTER VI

Course Code: CHE6B14(P)

Core Course XIV: PHYSICAL CHEMISTRY PRACTICAL

Course outcome (s)	
CO1	To enable the students to develop analytical skills in determining the physical properties (physical constants).
CO2	To develop skill in setting up an experimental method to determine the physical properties.
CO3	To understand the principles of Refractometry, Potentiometry and Conductometry.

SEMESTER VI

Course Code: CHE6B15(P)

Core Course XV: ORGANIC CHEMISTRY PRACTICAL

Course outcome (s)	
CO1	To enable the students to develop analytical skills in organic qualitative analysis.
CO2	To develop talent in organic preparations to ensure maximum yield.
CO3	To apply the concept of melting or boiling points to check the purity of compounds.
CO4	To analyse and characterise simple organic functional groups.
CO5	To analyse individual amino acids from a mixture using chromatography.

SEMESTER VI

Course Code: CHE6B16(P)

Core Course XVI: INORGANIC CHEMISTRY PRACTCAL-II

Course outcome (s)	
CO1	To enable the students to develop analytical skills in inorganic quantitative analysis.
CO2	To understand the principles behind gravimetry and to apply it in quantitative analysis.
CO3	To understand the principles behind colorimetry and to apply it in quantitative analysis.

SEMESTER VI

Course Code: CHE6B17(P)

Core Course XVII: INORGANIC CHEMISTRY PRACTCAL-III

Course outcome (s)	
CO1	To enable the students to develop skills in inorganic quanlitative analysis.
CO2	To understand the principles behind inorganic mixture analysis and to apply it in quanlitative analysis.
CO3	To analyse systematically mixtures containing two cations and two anions.

SEMESTER VI

Course Code: CHE6B18(Pr)

Core Course XVIII: PROJECT WORK

Course outcome (s)	
CO1	To understand the scientific methods of research project.
CO2	To apply the scientific method in life situations.
CO3	To analyse scientific problems systematically.

SEMESTER I

Course Code: CHE1C01

Complementary Course I: GENERAL CHEMISTRY

Course outcome (s)	
CO1	To understand and to apply the theories of quantitative and qualitative analysis.
CO2	To understand the theories of chemical bonding.
CO3	To appreciate the uses of radioactive isotopes.
CO4	To understand the importance of metals in biological systems.

SEMESTER II

Course Code: CHE2C02

Complementary Course II: PHYSICAL CHEMISTRY

Course outcome (s)	
CO1	To understand the importance of free energy in defining spontaneity.
CO2	To realise the theories of different states of matter and their implication.
CO3	To understand the basic principles of electrochemistry.

SEMESTER III

Course Code: CHE3C03

Complementary Course III: ORGANIC CHEMISTRY

Course outcome (s)	
CO1	To understand the basic concepts involved in reaction intermediates.
CO2	To realise the importance of optical activity and chirality.
CO3	To appreciate the importance of functional groups and aromatic stability.
CO4	To understand the basic structure and importance of carbohydrates, nucleic acids, alkaloids and terpenes.

SEMESTER IV

Course Code: CHE4C04

Complementary Course IV: PHYSICAL AND APPLIED CHEMISTRY

Course outcome (s)	
CO1	To understand the basic concepts behind colloidal state and nanochemistry.
CO2	To understand the importance of green chemistry and pollution prevention.
CO3	To appreciate the importance of different separation methods and spectral techniques.
CO4	To understand the extent of chemistry in daily life.

SEMESTER IV

Course Code: CHE4C05(P)

Complementary Course V: CHEMISTRY PRACTICAL

Course outcome (s)	
CO1	To understand the basic concepts of inter group separation.
CO2	To enable the students to develop analytical and preparation skills.

PROGRAMME OUTCOMES

To enable the students

- understand basic facts and concepts in chemistry
- apply the principles of chemistry
- appreciate the achievements in chemistry and to know the role of chemistry in nature and in society
- familiarize with the emerging areas of chemistry and their applications in various spheres of chemical sciences and to apprise the students of its relevance in future studies
- develop skills in the proper handling of instruments and chemicals
- familiarize with the different processes used in industries and their applications
- develop an eco-friendly attitude by creating a sense of environmental awareness. To be conversant with the applications of chemistry in day-to-day life
- enable the students to develop analytical and preparation skills
- understand the extent of chemistry in daily life
- understand the importance of nanomaterials
- appreciate the importance of green approach in chemistry
- to develop skills that are required to run a business successfully
- update and expand basic informatics skills of the students

- equip the students to effectively utilize the digital knowledge resources for their studies

Programme Outcome

BSc PHYSICS			
SEMESTER 1	PH1 B01	Methodology of Science and Physics	inculcate scientific aptitude in students and familiarise the history of development of physics up to modern age
SEMESTER 2	PH2 B02	Properties of Matter, Waves and Acoustics	identify and describe properties of matter, including flexibility, strength, transparency, hardness etc. Apply the linear acoustic wave equation and explain the relationship between pressure and particle velocity for plane waves and spherical waves.
SEMESTER 3	PH3 B03	Mechanics	develop parameters defining the motion of mechanical systems and their degrees of freedom, study of the interaction of forces between solids in mechanical systems, Newton's laws of motion and conservation principles
SEMESTER 4	PH4 B04	Electrodynamics I	Examine how charges interact with each other and create electric fields. analyse the static magnetic field properties describe and explain the relationship between the electric field and the electrostatic potential. describe and explain the generation of magnetic fields by electrical currents.
SEMESTER 4	PH4 B05	Practical V	Perform experiments systematically
SEMESTER 5	PH5 B06	Electrodynamics II	describe the foundations of electrodynamics, the multipole expansion of the electromagnetic field, the study of the energy balance, and explain Maxwell's equations in vacuum and inside matter after this advanced course. Describe the methods of vector calculus to solve problems in electromagnetism, concepts and properties of electromagnetic wave propagation and emission and also determine the transient and AC response of circuits containing R, L and C components.

SEMESTER 5	PH5 B07	Quantum Mechanics	analyse concepts in quantum mechanics Review of the Schrodinger equation, operators, eigen functions, compatible observables, infinite well in one and three dimensions, degeneracy; harmonic oscillator in one and three dimensions; hydrogen atom, spin.
SEMESTER 5	PH5 B08	Physical Optics and Modern Optics	Identify the concepts in the discipline of optics and its role in the modern society. use the geometrical approximation, including Fermat's principle. develop a thorough fundamental knowledge within interference, coherence, polarization and diffraction. analyze interference between plane waves and spherical waves, reflection and transmission of plane waves, and optical wave guiding within thin plates and optical fibers. develop a thorough knowledge of the polarization of light and its changes upon reflection and transmission and will learn to analyze the polarization in optical systems using the Jonesformalism. develop an understanding of Fresnel's and Fraunhofer's diffraction.
SEMESTER 5	PH5 B09	Electronics (Analogue and Digital)	explain basic circuit concepts and responses and do linear modelling of passive elements and sources. use analytical techniques in resistive circuits energized by direct voltage and current sources and evaluate lecture circuit laboratory bench experiments. explain fundamental concepts of the decimal number system. Represent number systems in powers of the base converting from one number system to another and represent data in codes and interpret those codes. explain the basic logic operations to interpret logic functions, circuits, truth tables, and Boolean algebra expressions and apply the laws of Boolean algebra to simplify circuits .

SEMESTER 6	PH6 B10	Thermal and Statistical Physics	State precisely the terms foundational principles of thermodynamics and statistical mechanics and how they relate to broader physical principles. Devise and implement a systematic strategy for solving a complex problem in thermodynamics and statistical mechanics by breaking it down into its constituent parts. Apply all the concepts needed to state the laws of thermodynamics, such as 'thermodynamic equilibrium', 'exact' and 'inexact' differentials and 'reversible' and 'irreversible' processes and Use the laws of thermodynamics to solve a variety of problems, such as the expansion of gases and the efficiency of heat engines. Apply the meaning and significance of state variables in general. Apply the efficiency and properties of thermodynamic cycles for heat engines, Manipulate a variety of thermodynamic derivatives, including a number of 'material properties' such as heat capacity, thermal expansivity and compressibility.
SEMESTER 6	PH6 B11	Solid State Physics, Spectroscopy and Laser physics	Develop a basic knowledge of solid state physics. distinguish between perfect conduction and perfect diamagnetism and give a qualitative description of the Meissner effect. explain how observation of why the magnetic flux through a superconducting circuit remains constant, and describe applications of this effect.
SEMESTER 6	PH6 B12	Nuclear Physics, Particle Physics and Astrophysics	Develop an understanding of the fundamentals of nuclear matter as well as some of the most important applications of nuclear physics. Analyse elementary ideas of radio activity and nuclear reactions. Perform a qualitative study of particle accelerators and stellar positions and constellations

SEMESTER 6	PH6 B13	Core Course XIII (Elective)Computational Physics	Students should gain basic knowledge of solid state physics. Apply the concept of reciprocal space and be able to use it as a tool know the significance of Brillouin zones know what phonons are perform estimates of their dispersive and thermal properties be able to calculate thermal and electrical properties in the free-electron model know Bloch's theorem and what energy bands are know the fundamental principles of semiconductors, including pn-junctions, and be able to estimate the charge carrier mobility and density. account for what the Fermi surface is and how it can be measured know basic models of magnetism outline the importance of solid state physics in the modern society.
SEMESTER 6	PH6 B14	Practical XIV – Practical II	perform experiments systematically
SEMESTER 6	PH6 B15	e Practical XV – Practical III	perform experiments systematically
SEMESTER 6	PH6 B16	Course XVI Project& Tour report	perform project work.
MSc PHYSICS			
SEMESTER 1	PHY1C01	Classical Mechanics	identify and describe classical systems using Lagrangian and Hamiltonian formulation and the transformation from classical to quantum mechanics. formulate the dynamics of rigid body and oscillations of small amplitude
SEMESTER 1	PHY1C02	Mathematical Physics I	develop the mathematical methods and techniques widely used to describe various physical phenomena.

SEMESTER 1	PHY1C03	ElectrodYnamics & Plasma Physics	describe the foundations of electrodynamics, the multipole expansion of the electromagnetic field, the study of the energy balance, and explain Maxwell's equations in vacuum and inside matter after this advanced course. examine the methods of vector calculus to solve problems in electromagnetism, concepts and properties of electromagnetic wave propagation and introduce the concept of relativistic electrodynamics and plasmaphysics.
SEMESTER 1	PHY1C04	Electronics	use analytical techniques in resistive circuits energized by direct voltage and current sources and evaluate lecture circuit laboratory bench experiments such as FET,OP-AMPS etc. explain concepts of the basic memory elements using flip flops and various applications in registers ,counters etc. explain the basic logic operations to interpret logic functions, circuits, truth tables, and Boolean algebra expressions and apply the laws of Boolean algebra to simplify circuits
SEMESTER 1	PHY1P01	General Physics Practical I	Performs Practical sytematically
SEMESTER 1	PHY1P02	Electronics Practical I	Performs Practical sytematically
SEMESTER 2	PHY2C05	Quantum Mechanics I	Examine concepts in quantum mechanics such that the behavior of the physical universe, postulates of quantum mechanics. Review of the Schrodinger equation, operators, eigen functions, compatible observables, infinite well in one and three dimensions, degeneracy; harmonic oscillator in one and three dimensions; hydrogen atom, spin.
SEMESTER 2	PHY2C06	Mathematical Physics II	Develops an understanding of special mathematical techniques like group theory, calculus of variations, Greens functions etc which find applications certain special types of physical systems

SEMESTER 2	PHY2C07	Statistical Mechanics	Develops an understanding of various natural phenomena like Bose-einstein condensates, fermionic systems etc. in terms of ensemble theory
SEMESTER 2	PHY2C08	Computational Physics with Lab	solve mathematical problem using numerical techniques and develop programming skill in python language.
SEMESTER 2	PHY2P03	General Physics Practical II	Performs Practical sytematically
SEMESTER 2	PHY2P04	Electronics Practical II	Performs Practical sytematically
SEMESTER 3	PHY3C09	Quantum Mechanics II	solve quantum mechanical systems using time dependent and independent perturbation methods
SEMESTER 3	PHY3C10	Nuclear and Particle Physics	Examine concepts of particle physics and fundamental interactions. Describe various nuclear models.
SEMESTER 3	PHY3C11	Solid State Physics	develop knowledge of solid state systems including reciprocal lattices, band structure, magnetic and electric behaviour of solids.
SEMESTER 3	PHY3E01	Plasma Physics	Develop an understanding of various natural phoenomena and properties of plasma state
SEMESTER 4	PHY4Pr	Project	Performs Project systematically
SEMESTER 4	PHY4C12	Atomic And Molecular Spectroscopy	Develops understanding of atomic and molecular structure of various micro systems using the interaction of light with atoms and molecules.
SEMESTER 4	PHY4E13	Laser Systems, Optical Fibres And Applications	Develops understanding of theoretical analysis of various laser systems and optical fibbers.
SEMESTER 4	PHY4E20	Microprocessors And Applications	Performs machine language programming using the microprocessor programming in 8085 microprocessor for further research in machine language programming

DEPARTMENT OF PSYCHOLOGY

Objectives

To produce the right environment to the student community and mould them as competent and true professionals in psychology with excellent skills, character and attitude in research, clinical and teaching areas leading to the overall development.

Programme specifications

Programme title	Psychology
Pattern of delivery	Full time
Programme length	3 years

Aims of the programme

- To equip students with comprehensive knowledge and skills in regards to human psyche and actions.
- To develop a strong research background and understanding of the scientific foundation of psychology.
- To become aware of the applications of psychology in the professions associated with psychology.
- To learn about psychological theory and research and how this can be applied to the real world.

Programme curriculum map

DELIVERY PATTERN	PAPER	PAPER CODE	OBJECTIVE
First semester	Basic themes in psychology -I	PSY1B01	To generate interest in Psychology • To make familiar the basic concept of the field of Psychology with an emphasis on applications of Psychology in everyday life. To understand the basics of various theories in Psychology • To provide basic knowledge about systems and processes like attention, learning and Consciousness
Second semester	Basic themes in psychology - II	PSY2B01	To generate interest in Psychology To make familiar the basic concept of the field of Psychology with an emphasis on the applications of Psychology in everyday life To understand the basics of various theories in

			Psychology • To provide basic knowledge about systems and processes like cognition, memory, motivation and emotion.
Third semester	Psychological measurement and testing	PSY3B01	To offer foundation on psychological measurement and testing • To provide the basis of test construction and to build up skills on developing psychometric test To familiarize the use s of psychological tests To make aware of ethical principals in testing
Fourth semester	Individual differences	PSY4B01	To provide theoretical knowledge about systems and processes like intelligence and personality To understand the history of intelligence and Personality Testing • To familiarize the student with various types of tests in

			Psychology
Fifth semester	Abnormal psychology-1	PSY5B01	To enable students to understand the concepts of abnormal behavior To develop awareness about different types of anxiety and stress disorders
	Social psychology	PSY5B02	To encourage the students to know different therapeutic techniques in management of anxiety and stress disorders To enable the student to Understand and explain behavior in social settings • Explain the psychological aspects of various social phenomena To create awareness about the management of human behaviour in group settings a
	Developmental psychology	PSY5B03	To study human development in Psychological Perspectives

			To create awareness about major Psychological changes along with physical and cognitive development
	Psychological counseling	PSY5B04	To acquire theoretical knowledge in the areas of psychological counseling To understand the applications of counseling in various settings • To practice counseling techniques through role plays
	Health psychology	PSY5B05	To understand the Psychological, behavioral and cultural factors contributing to physical and mental health To study the management of different illnesses

Sixth semester	Abnormal psychology-II	PSY6B01	To develop awareness about major psychological disorders To acquaint the students with causes of major psychological disorders
	Applied Social psychology	PSY6B02	To familiarize the theoretical concept and research methods in applied Psychology. To give knowledge about application of Social Psychology in different areas like clinical,Educational, health and media. To understand the major social issue
	Developmental psychology- 11	PSY6B03	To study emotional and social development of life span periods. To study the vocational development and adjustments in adulthood.

			To understand the period of late adulthood in India.
	Life skill education : Applications and training	PSY6B04	To promote life skill education To develop abilities for adaptive and positive behavior
	Positive psychology	PSY6B05	• To enhance self-confidence To familiarize the important concepts in positive psychology To understand the importance of well being which allows people to understand what makes life worth living To give knowledge about the importance of factors contributing happiness elf-esteem

MA ENGLISH

SEMESTER I

EN1CO1: British literature from the Age of Chaucer to the 18th Century

- The realm of literature is revealed with a vivid insight into the classics.
- Identify and analyse the chief features of various literary periods from Chaucer to 18th Century British Literature
- Identify different literary genres
- Analyse the life and works of various authors

EN1CO2: British literature- The Nineteenth Century

- Identify and analyse the chief features of various literary periods in 19th Century British Literature
- Identify different literary genres
- Students are expected to be aware of literary, critical and political developments in England from the period of the French revolution to the beginning of the Nineteenth Century
- Conceptualize the Genre of Novel and its type's viz. Allegorical, Gothic, Historical, Epistolary, Picaresque, and Psychological.
- Analyse the life and works of various authors belonging to the period.
- Develops an understanding of the language used in different time frames and by different authors.

ENG1CO3: History of English Language

- Examine the history of English language and its structure
- Demonstrate an understanding of the development of the vocabulary of the English language from various European and non-European sources
- Examine the various theories in the development of English language.
- Develop a critical relationship between literary texts and social structures.
- Examine the structure, syntax, and stylistic features of the English language

ENG1 C04: Indian Literature in English

- Explore a variety of Indian literature in English, ranging from the late nineteenth-century to the present day.
- Develop an understanding of the chief features of Indian English Literature
- Examine the socio-political and economic contexts in which the literary works were produced.
- Examine features of diasporic literature
- Analyse the colonial and post-colonial elements in the writings of various authors

SEMESTER II

ENG2C05: Twentieth Century British Literature up to 1940

- Analyse and critically examine diverse forms of discourse.
- Analyse an array of literary texts and genres produced in British and Irish contexts after 1900, up to the period preceding World War II.
- Develop insights about the literary merits of these texts and their aesthetic appreciation
  Examine the historical contexts in which literature was written during the period.
- Develop an awareness of various literary movements of the period
- Analyse various styles and concepts prevalent during the period including the stream of consciousness technique, spring rhythm, Freudian psychology, free verse etc.

ENG2C06: Literary Criticism and Theory – Part 1(Up to New Criticism)

- Introduction to the basics of Literary Criticism
- Develop an analysis of some of the foundational texts in literary criticism and theory
- Examine various literary works using various theoretical contexts examine the historical and social, political and economic contexts in which these theoretical works were produced.
- Compare and contrast the various developments in the methods of analysing literary texts.
- Demonstrate and understanding of key terms in criticism and theory and trace implications in source texts.
- Evaluate and analyze the strengths and limitations of critical/theoretical arguments.
- Helps to write a critical appreciation

ENG2C07: American Literature

- An idea on the background of civil war and Transcendentalism
- Develop a critical Applying of an array of literary texts and genres produced in colonial and post-colonial America
- Emphasizes on the meaning and the significance of American Dream, then and now
- Examine the literatures produced by American born authors and those by immigrants
- Identify the key features of prose, poetry and plays
- Develop a critical Applying of the major historical and cultural developments in various times

ENG2 C08: Postcolonial Writings

- Examine the chief features of postcolonial poetry
- Analyse key texts and critical debates within postcolonial studies.

- Develop a critical Applying of various terms such as diaspora, colonialism, post colonialism etc.
- Examine the lives of various postcolonial poets.
- Examine the various motifs and themes discussed in the poems

SEMETER III

ENG3CO9 Twentieth Century British Literature Post 1940

- Develop an awareness of the chief features of British literature produced after 1940
- Develop an applying understanding of the authors during the period. Analyse various literary movements during the period.
- Examine the historical contexts in which literature was written during the period.
- Develop critical perspectives in interpreting the literary works
- Develop an understanding of the lives of the authors who wrote during the period.

ENG3C10 Literary Criticism and Theory – Part 2

- A clear picture regarding the major schools of 20th-and-21st-century literary criticism and theory.
- A clear understanding of important texts in theory and criticism
- Develop a better approach to appreciate a literal work.
- Recognize and discuss aspects of different writings
- Enable to arrive at valid interpretations of literary texts
- Develop an awareness of cultural and intercultural concerns relating to women's writing, diasporic and the marginalised.
- Apply selected theories to specific literary works.
- Develop analytical skills and critical thinking through reading, discussion, and written assignments.
- Develop critical perspectives in interpreting the literary works

ENG3 E02 European Fiction in Translation

- Demonstrate a working knowledge of the characteristics of various European Literary works in translation
- To understand the shades of naturalism and realism

- Enable to analyse the important philosophical (existentialism) and political positions they represent.
- Major authors and their contributions
- Develop an awareness of the universal human concerns that are the basis for literary works
- Compare and contrast various literary works produced in different European regions
- Examine the historical contexts in which literature was written during the period.

ENG 3 E 06: Teaching of English

- Enable the students to develop critical awareness of different philosophies of language learning and language teaching
- Teaching Language through Literature, Important Techniques Stylistic Approach to the Teaching of Literature.
- Inculcate the significance of ICT in teaching and learning
- Develop and enhance the teaching principles and methods, lesson planning, teaching aids and model building, teaching evaluation, and implement and evaluate curriculums under the guidance.
- Student will learn the Essentials of Presentation Skills, Elocution, Debate etc

SEMESTER IV

ENG4C11: English Literature in the 21st Century

- Deepens knowledge in English literature for higher studies
- Help the students to improve their understanding of the major writers and their contributions to the realm of literature.
- To analyze the various elements of poetry, such as diction, tone, form, genre, imagery, figures of speech, symbolism, theme, etc.
- Enables the students to analyze literature and fiction using appropriate theoretical, historical, and cultural apparatus.

ENG 4 C12: Dissertation/Project

- Identify and define problems in literature and language.
- Develop hypotheses
- Analyse, evaluate, select and integrate information
- Review and summarize the available literature
- Apply appropriate research methods to throw light on the problem and possible answers.
- Collect data systematically and conduct research responsibly and ethically.
- Record and arrange data and information in a scientific manner following the MLA citation system.
- Develop the ability to properly address an issue in writing, develop and sustain an idea and produce publishable results.

ENG4E14: Indian English Fiction

- Develop an understanding of Indian English fiction
- Examine the development of the history of Indian English fiction from late nineteenth century to the present day.
- Analyse the current trends in Indian English fiction
- Compare and contrast the unique features of Indian English Fiction.
- Examine the socio-political and economic contexts in which these literary works were produced.
- Examine features of diasporic literature
- Analyse the colonial and post-colonial elements in the writings of various authors.

ENG4 E18**:** Malayalam Literature in English Translation

- Develop a working knowledge of the characteristics of Malayalam Literature
- Analyse the current trends in Malayalam fiction and poetry and drama.
- Develop an understanding of the lives of the authors who wrote.

DEPARTMENT OF POLYMER CHEMISTRY
MSc POLYMER CHEMISTRY

COURSE OUTCOMES

SEMESTER I

1 PCH1C01 THEORETICAL CHEMISTRY

CO1 To familiar about the Mathematical Concepts and Historical Sketch of Quantum Mechanics

CO2 To study Postulates of Quantum Mechanics and Quantum Mechanics of Translational Motion

CO3 Quantum Mechanics of Vibrational Motion and Rotational Motion

CO4 Quantum Mechanics of Hydrogen-Like Atoms

CO5 Quantum Mechanics of Many- Electron Atoms and Approximation Methods

CO6 Chemical Bonding- Schrodinger equation for a molecule, Valence Bond

CO7 MO Theory for More Complex Molecules and Intermolecular Forces

2 PCH1C02 INORGANIC CHEMISTRY

CO1 To know Acid base theories

CO2 Boranes-Classification, Synthesis, structure, reactions and bonding

CO3 Crystalline solids

CO4 Electronic properties of solids

CO5 Coordination chemistry

CO6 Chemistry of transition and inner transition elements

3 PCH1C03 ORGANIC CHEMISTRY

CO1 Chemical bonding and Aromaticity

CO2 Basic Concepts in the Study of Organic Reaction Mechanisms

CO3 Isomerism

CO4 Conformational Analysis

CO5 Reactions of Carbon-Hetero multiple Bonds

CO6 Electrophilic and Nucleophilic substitution in aromatic systems

CO7 Photochemical and Electrochemical Synthesis

4 PCH1C04 POLYMER CHEMISTRY

CO1 To study about the Basic concepts of Polymer science, history

CO2 To know about the Synthesis of high polymers

CO3 polymerization process study and evaluation

CO4 Copolymerisation techniques

CO5 Polymerisation conditions

CO6 Polymer degradation and stabilization

4 PCH1L01 INORGANIC CHEMISTRY PRACTICAL

CO1 Molecular Symmetry and Mathematical Groups

CO2 Theory of Molecular Symmetry

CO3 Applications of Group Theory

CO4 General Theory of Spectra, Microwave and Vibrational, Raman, Electronic, NMR, ESR and MossBauer Spectroscop

SEMESTER II

PCH2C06 - ORGANIC CHEMISTRY-II

CO1 To study about the Pericyclic Reaction

CO2 Chemistry of Free Radicals and Photochemistry

CO3 Molecular Rearrangements in organic chemistry

CO4 Evaluation of Organic Spectroscopy in analyzing compounds

CO5 Importance of Organic Reactions and Mechanism

CO6 Heterocyclic Compounds and Natural Product Chemistry

CO7 Synthetic Reagent and its industrial application

PCH2C07 - PHYSICAL CHEMISTRY-I

CO1 To know all the aspects of Thermodynamics

CO2 A keen knowledge on Electrochemistry

CO3 Nuclear Chemistry

CO4 Radiation Chemistry

PCH2C08 - POLYMER TECHNIQUES

CO1 Introduction to polymer processing

CO2 Extruders for plastics& rubbers, twin screw extruders, extrusion process

CO3 Adhesives and surface coatings materials, importance

CO4 Polymer blends-importance

CO5 Introduction to composite material

PCH1L01 & PCH2L04 - INORGANIC CHEMISTRY PRACTICAL-I & II

CO1 Separation and identification of f metal ions

CO2 importance of Volumetric Determinations

CO3 Colorimetric determination for quantitative estimation

PCH1L02 & PCH2L05 - ORGANIC CHEMISTRY PRACTICAL-I & II

CO1 Usefull Laboratory Techniques

CO2 Qualitative Organic Analysis

CO3 Organic Preparation

CO4 Quantitative Organic Analysis.

PCH1L03 & PCH2L06 - PHYSICAL CHEMISTRY PRACTICAL-I & II

CO1 Viscosity experiments

CO2 Conductivity Experiments

CO3 Potentiometry

CO4 Chemical Kinetics

CO5 Adsorption

SEMESTER III

PCH3C09 - INORGANIC CHEMISTRY-II

CO1 Electronic spectra of complexes

CO2 Reaction mechanisms of metal complexes

CO3 Infrared, CD- and ORD and ESR spectra of metal complexes.

CO4 Organometallic compounds

CO5 Applications of organometallic compounds

CO6 Introduction to bioinorganic chemistry

PCH3C10 - PHYSICAL CHEMISTRY-II

CO1 Statistical Mechanics

CO2 Chemical Kinetics

PCH3C11 - INSTRUMENTAL METHODS AND COMPUTATIONAL CHEMISTRY

CO1 Errors and treatment of analytical data

CO2 Electro Analytical Methods- various techniques

CO3 Introduction to Computers in Chemistry

PCH3E01 - POLYMER MATERIALS

CO1 Structure, preparation, preparation and applications of polyolefins

CO2 Structure, preparation, preparation and applications of polyolefins: polyethylene

CO3 Polyesters: structure, preparation, properties

CO4 Polyamides and polyimide

CO5 Silicon polymers; structure, preparation, properties and applications

CO6 Speciality polymers- thermally resistant polymers, fire resistance, hydrophilic polymers

SEMESTER IV

PCH4C12 - PHYSICAL CHEMISTRY OF POLYMERS

CO1 Polymer chain structure and stereochemistry

CO2 Conformation of the polymer chain

CO3 The crystalline state of solids

CO4 Liquid crystalline polymers

CO5 Glass transition, dynamic mechanical behaviour

CO6 Crosslinked polymers and rubber elasticity

CO7 Introduction to the viscoelastic properties of polymers

PCH4E02 - TESTING AND CHARACTERISATION OF POLYMERS

CO1 Standards and standards organizations

CO2 Mechanical properties of polymers

CO3 Electrical and optical properties

CO4 Flow properties of polymer

CO5 Spectroscopic characterization of polymers:

CO6 Test on rubbers

PCH4E03 - i) PLASTICS AND FIBER TECHNOLOGY

CO1 Mixing and compounding

CO2 Moulding techniques

CO3 Reinforced plastics

CO4 Fibre technology

PCH4E03 - ii) POLYMER NANOTECHNOLOGY

CO1 Introduction to Nanotechnology with special emphasis on Nanocomposites

CO2 Classification of nanocomposites and nano fillers

CO3 Processing of Nanocomposites

CO4 Evaluation & Testing of Nanocomposites

CO5 Application of nanocomposites in modern industry

PCH3L07 & PCH4L10 - POLYMER ANALYSIS AND PREPARATIONS PRACTICAL–I & II

CO1 Preparation of Polymers

CO2 Determination of filler content in compounded polymers

CO3 Analysis of polymer samples

PCH3L08 & PCH4L11 - POLYMER CHEMISTRY PRACTICAL-I & II

CO1 Latex Analysis

CO2 Polymer processing

CO3 Measurement of mechanical properties

DEPARTMENT OF COMPUTER APPLICATION

Objective

To produce the right environment to the student community and mould them as competent and true professionals in computer applications with excellent skills, character & attitude, leading to societal transformation and development.

Programme specifications

Programme Title	BCA
Pattern of Delivery	Full Time
Programme Length	3 Years

Aims of the programme

- To excel in problem solving and programming skills in the various computing fields of IT industries.
- To develop the ability to plan, analyze, design, code, test, implement and maintain software product for real time system.
- To experience the students in finding solutions and developing system based applications for real time problems in various domains involving technical, managerial, economical & social constraints.
- To prepare the students to pursue higher studies in computing or related disciplines and to work in the fields of teaching and research.

Programme curriculum map

Delivery pattern	Paper	Paper code	Objective
First Semester	Computer fundamentals & HTML	BCA1B01	➢ To learn the basics of Computer organization ➢ To equip the students with fundamentals of Computer ➢ To learn the basics of Internet and webpage design ➢ To equip the students to write algorithm and draw flow chart for solving simple problems
Second Semester	Problem solving using C	BCA2B02	➢ To learn the concepts of programming. ➢ To study C language
Third Semester	General Informatics	BCA3A12	➢ To equip the students to effectively utilize the digital knowledge resources for their studies.
	Data structure using C	BCA3B04	➢ To learn the basic concepts of different data structures.
	Theory of Computation	BCA3B06	➢ To get a general understanding on different languages, grammar, automata ➢ To get a general introduction to Theory of computer science

Fourth Semester	Database design and RDBMS	BCA4B05	➢ To learn the basic principles of database and database design. ➢ To learn the basics of RDBMS. ➢ To learn the concepts of database manipulation SQL. ➢ To study PL/SQL language.
	E commerce	BCA4C07	➢ To get a general introduction Electronic Commerce framework ➢ To get a general understanding on various electronic payment system ➢ To get a general understanding on Internal information systems ➢ To get a general understanding on the new age of information.
	Computer Graphics	BCA4C08	➢ To learn basics of Computer Graphics
Fifth Semester	Android Programming	BCA5B08	➢ To have a review on concept of Android programming. ➢ To learn Android Programming Environments. ➢ To practice programming in Android.
	Programming in Java.	BCA5B09	➢ To provide the students with the basic programming skill in Java.
	Computer Networks	BCA5B10	➢ To get a general understanding on different OSI layers. ➢ To get a general introduction to computer networks.
	Computer organization and Architecture	BCA5B11	➢ To learn basic Architecture of a Computer. ➢ To learn basic Computer Organization.
	Microprocessor	BCA5B12	➢ To study the architecture of Microprocessors like 8085, 8086 and higher versions. To understand the instruction set.

Six Semester	Web Programming using PHP	BCA6B13	➢ To learn the web designing
	Software Engineering	BCA6B14	➢ To get a general understanding on software life cycle. ➢ To equip the students with basic system development skills.
	Operating system	BCA6B15	➢ To learn the basic concepts functions of operating system.

Programme curriculam map

B.Sc Zoology

Delivery pattern	Paper	Paper code	Outcomes
First semester	Animal diversity-Nonchordata-I	ZOL1B01	✓ Understand animal kingdom ✓ Able to describe unique characters of protozoa, porifera, coelenterate and helminthes ✓ Recognize the environmental role of phylum protozoa, porifera, coelenterate and helminthes ✓ Recognize the diversity from protozoa, porifera, coelenterate and helminthes ✓ Practice labelling diagrams
Second semester	Animal diversity-Nonchordata-II	ZOL2B02	✓ Recognize the animal diversity from phylum Annelida, Arthropoda, Mollusca, Echinodermata etc ✓ Able to describe unique characters of Annelida, Arthropoda, Mollusca, Echinodermata etc ✓ Distinguishing characters of non-chordates ✓ Understand economic importance of mollusks ✓ Aware the importance of insets in the world
Third semester	Animal diversity Chordata-I	ZOL3B03	✓ Understand the basic concepts about chordates ✓ Aquire the knowledge about different categories of chordates ✓ Able to describe unique characters of urochordates and cephalochordates ✓ Able to develop skills that distinguish poisonous and non poisonous snakes ✓ Identify the characters of amphibia and its parental care ✓ Understand the morphological, ecological and anatomical features of various fishes
Fourth semester	Animal diversity Chordata-II	ZOL4B04	✓ Understand different categories mammals ✓ Know the ecological role of mammals ✓ Study and understand external and internal characters of class aves

Fifth semester	Environmental biology, wild life conservation and toxicology	ZOL5B06	✓ Understand the interaction between organisms and environment ✓ Aquire the importance of wild life conservation and biodiversity ✓ Understand the impacts of environmental pollutions ✓ Know the environmental conservation methods ✓ Develops concepts about population dynamics and ecological energetic ✓ Understand the pesticides and insecticides problems and importance of organic farming
	Ethology, evolution and zoogoegraphy	ZOL5B07	✓ Aquire a scientific foundation about the origin of life on earth ✓ Learns human biological and cultural evolution ✓ Understand zoogeographical regions with their climatic and faunal peculiarities ✓ Know the innate and acquired types of behavior
	Cell biology and Genetics	ZOL5B08	✓ Understand cell theory, structure and function of different cell organelles ✓ Develop knowledge about cell cycle, membrane transport and cytoskeleton ✓ Deep understanding of mendelian genetics and its applications ✓ Learns human genetics, applied genetics, population genetics and microbial genetics
	General methodology in science, biostatistics and informatics	ZOL5B09	✓ Understand the descriptive statistics ✓ Know the applications and uses of statistics ✓ Aquire the awareness about social informatics and IT applications
Sixth semester	Biochemistry	ZOL6B10	✓ Understand the structure and function of biomolecules and their significance ✓ Know the importance of enzymes and vitamins ✓ Aquire a depth knowledge in production of various products using biochemistry

			✓ Application of biochemistry in various field
	Physiology and endocrinology	ZOL6B11	✓ Aquire a clear knowledge about structure, working and functions of different human organ systems ✓ Understand importance of physiology and its branches ✓ Know the process of metabolism ✓ Learns various glands and their functions in body
	Molecular biology and bioinformatics	ZOL6B12	✓ Understand the tools and techniques in molecular biology ✓ Aquire knowledge on transcription, translation, replication, gene regulation mechanisms etc ✓ Understand the field of genomics and proteomics ✓ Aware about databases and sequence similarity search tools in bioinformatics
	Reproductive biology, developmental biology and teratology	ZOL6B13	✓ Understand the terms- gametogenesis, fertilization and early development ✓ Aware about human reproductive system, fertility control and prenatal diagnosis ✓ Know the developmental process of primitive to advanced organisms in different phylum ✓ Understand the environmental disruption of animal development
	Biotechnology, microbiology and immunology	ZOL6B14	✓ Understand the prospects and challenges of microbes in various field ✓ Learn cell culture techniques ✓ Develop knowledge on application of genetic engineering ✓ Understand the scope of biotechnology ✓ Understand the function of biosensors

M.Sc Zoology

Delivery pattern	Paper	Paper code	Outcomes
First semester	Biochemistry and cytogenetics	ZO1CT01	✓ Understand biological importance of water and PH ✓ Know the enzyme mechanisms and enzyme kinetics ✓ Understand the structure and function of biomolecules and their significance ✓ Know the importance of vitamins ✓ Aquire a depth knowledge in production of various products using biochemistry ✓ Understand the application of biochemistry in various field
	Biophysics and biostatistics	ZO1CT02	✓ Understand the descriptive and application statistics ✓ Know the softwares in statistics ✓ Aquire the awareness about different techniques in biology ✓ Practical skill development in chromatography and electrophoresis ✓ Learn about applications of electromagnetic spectral analysis ✓ Aquire the knowledge about radioactivity, nuclear science etc
	Ecology and ethology	ZO1CT03	✓ Understand ecological energetic, biogeochemical cycles, population dynamics and species interactions ✓ Aquire deep understanding of the components of ecosystems and interactions ✓ Understand the importance of biodiversity conservation and its methods ✓ Understand the different types of pollution and its impacts on nature ✓ Understand the pesticides and insecticides problems and importance of organic farming ✓ Know the innate and acquired types of

			behavior ✓ Know the biology of learning and different types of learning
Second semester	Physiology	ZO2CT04	✓ Gains the knowledge on different human organ systems ✓ Understand causes, symptoms and complications of abnormal physiological conditions ✓ Develops deep knowledge on sports physiology ✓ Understand the sensory physiology ✓ Know the physiology of movements ✓ Understand the process of temperature regulation
	Molecular biology	ZO2CT05	✓ Know the detailed information about membrane pumps and membrane transport ✓ Learns the cell signaling ✓ Understand the gene regulation in prokaryotes and eukaryotes ✓ Aware the knowledge on cancer ✓ Understand the tools and techniques in molecular biology ✓ Expertice in molecular biology lab
	Systematic and evolution	ZO2CT06	✓ Understand process of evolution ✓ Aware the knowledge about fossils and palaentology ✓ Understand lamarkisms,darwinisms etc ✓ Know about difference in systematics and taxonomy ✓ Understand the principles and methods of taxonomy ✓ Develop awareness about classification of animals ✓ Understand to make taxonomic keys
Third semester	Immunology	ZO3CT07	✓ Know the concepts of immunology ✓ Understand Immune the cells and its functions ✓ Aquire a solid foundation on facts related to immune system
	Developmental	ZO3CT08	✓ Aquire advanced information on

	biology and endocrinology		developmental biology topics ✓ Develops knowledge about medically assisted human reproductive technologies and IVF ✓ Understand difference between specification and determination ✓ Able to understand the characteristics that make an organism ideal for the study of developmental biology
	Entomology I: Morphology and taxonomy	ZO3ET09	✓ Able to categorize insects based on their morphology ✓ Understand the morphology of different orders and their categories ✓ Know the impacts of insects on the nature
Fourth semester	Biotechnology and microbiology	ZO4CT10	✓ Understand the properties and structure of viruses, bacteria and virions ✓ Aquire knowledge about microbes, waste treatment, bioremediation and enrichment of soil fertility ✓ Learn steps in gene cloning and recombinant DNA technology ✓ Develops knowledge about transgenic animals, DNA barcoding and gene therapy
	Entomology II: Anatomy and physiology	ZO3ET11	✓ Understand different physiological system of insects ✓ Know the comparative anatomy of insect on various orders
	Entomology III: Agricultural, medical and forensic entomology	ZO3ET12	✓ Enable them to identify different agricultural pests ✓ Understand pest control and IPM strategies ✓ Know the diseases spread by insects

B.Com Computer Application

Programme Outcome, Programme Specific Outcome and Course Outcome

B. Com	
Programme Outcome	This program could provide well trained professionals for the Industries, Banking Sectors, Insurance Companies, Financing companies, Transport Agencies, Warehousing etc., to meet the well trained manpower requirements. The graduates will get hands on experience in various aspects acquiring skills for Marketing Manager, Selling Manager, Over all Administration abilities of the Company.
Programme Specific Outcome	The students should possess the knowledge, skills and attitudes during the end of the B.com degree course. By virtue of the training they can become an Manager, Accountant , Management Accountant, cost Accountant, Bank Manager, Auditor, Company Secretary, Teacher, Professor, Stock Agents, Government jobs etc.,
Course	**Outcomes**
Management concepts and Business Ethics	To enable the students to know the intricacies of Business Management. Students will demonstrate critical-thinking, problem solving skills, effective written oral communication And the global environment in which businesses operate. They will equipped to recognize when change is needed, adapt to change as it occurs, and lead change. And student able to analyse ethical issues in organization and help to understand the right and wrong things in organization
Managerial Economics	The students acquires the knowledge of Demand forecasting in sales management, Price fixing, market competitors, and management business economically.
Financial accounting	On successful completion of this course the student are enabled with the Knowledge in the practical applications of accounting.
Marketing Management	On successful completion of this course the students should have the practical knowledge and he tactics in the marketing and enable to

	understand the Principles of marketing management, market segmentation, Product life cycle, Pricing, Branding etc.
Basic Numerical Skills	It makes the students to analyze the statistical data in an organization. They learn various techniques to organize for calculating profit and risk.
General Informatics	The student will enable the knowledge of Information technology, software and Hardware, Internet computer basics etc
Business Regulations	On successful completion of this course, the student should be well-versed in basic provisions regarding legal frame work governing the business world. To inculcate knowledge on various laws relating to business such as law of contract, law of sale of goods, law of agency, Negotiable Instruments Act etc. and Making students to know about laws in insurance sector
Corporate Accounting	This course aims to enlighten the students on the accounting procedures followed by the Companies.
	To enable the students to be aware on the Corporate Accounting in conformity with the provision of the Companies Act.
E-Commerce	This paper empower the students to access e-commerce requirement of a business and developing E-plants etc.
Entrepreneurship Development	The student enable entrepreneurship development skills, and able to start new venture.
Banking and Insurance	To enlighten the students' knowledge on Banking Regulation Acts. After the successful completion of the course the student should have a thorough knowledge on Indian Banking System and Acts pertaining to it.

Cost Accounting	To keep the students conversant with the ever – enlarging Frontiers of Cost Accounting knowledge. After the successful completion of the course the student should have a thorough knowledge on the cost accounting principles and the Methods of accounting cost and knowledge of Cost sheet, Material issues, Labour cost.
Quantitative Techniques for Business	To inculcate knowledge on demonstrate understanding of basic concepts of statistics embedded in their course. The objective of this paper is to provide an understanding for the graduate business student on statistical concepts to include measurements of location and dispersion, probability, probability distributions, sampling, estimation, hypothesis testing, regression, and correlation analysis, multiple regression and business / economic forecasting
Accounting for Management	This course aims to develop an understanding of the conceptual framework of Management Accounting. After the successful completion of the course the student acquires the knowledge in the Management Accounting Techniques in business decision
Business research Methods	On successful completion of this course the student are enabled with the Knowledge in Research methods. They possessed the ability to conduct the research which helps them in their career.
Human Recourse Management	On Successful Completion of this subject, the students should have understood the functions of Human Resource /Personnel Department, Manpower planning, performance appraisal, Salary administration, Labour Welfare, Industrial Relations etc.
Business Applications of Computers	To help the students to acquire basic knowledge about computer and its applications in various areas of business. > To enable the students to understand the modern trends and technologies incomputer applications.
Business Information system	To enable the students to acquire basic knowledge in the information technology and its relevance to the various areas of business

Income Tax Law and Practice	This course aims to provide an in-depth knowledge on the provisions of Income Tax. To familiarize the students with recent amendments in Income-tax. On successful completion of this course, the student should be well versed in the prevailing Act.
Auditing	This paper gives the knowledge of examines the principles and practices of internal and external auditing. The students can capable to understand the auditing as a component of recurrent and strategic activities, risk assessment, internal control, systems evaluation, forensic accountability, and contemporary audit issues and challenges.
Office Automation tools	To enable the students to acquire basic knowledge in the various office automation tools and its applications in the various areas of business.
Computerised accounting with TALLY	To enable the students to acquire basic knowledge in the computerized accounting systems and its applications in the area of business.
Project (Three weeks Project and Viva voce)	This gives practical exposure in the Project work, knowledge which will equip the students in Research work.

B.Com Finance

Programme Outcome, Programme Specific Outcome and Course Outcome

B. Com	
Programme Outcome	This program could provide well trained professionals for the Industries, Banking Sectors, Insurance Companies, Financing companies, Transport Agencies, Warehousing etc., to meet the well trained manpower requirements. The graduates will get hands on experience in various aspects acquiring skills for Marketing Manager, Selling Manager, Over all Administration abilities of the Company.
Programme Specific Outcome	The students should possess the knowledge, skills and attitudes during the end of the B.com degree course. By virtue of the training they can become an Manager, Accountant , Management Accountant, cost Accountant, Bank Manager, Auditor, Company Secretary, Teacher, Professor, Stock Agents, Government jobs etc.,
Course	**Outcomes**
Management concepts and Business Ethics	To enable the students to know the intricacies of Business Management. Students will demonstrate critical-thinking, problem solving skills, effective written oral communication And the global environment in which businesses operate. They will equipped to recognize when change is needed, adapt to change as it occurs, and lead change. And student able to analyse ethical issues in organization and help to understand the right and wrong things in organization
Managerial Economics	The students acquires the knowledge of Demand forecasting in sales management, Price fixing, market competitors, and management business economically.
Financial accounting	On successful completion of this course the student are enabled with the Knowledge in the practical applications of accounting.
Marketing Management	On successful completion of this course the students should have the practical knowledge and he tactics in the marketing and enable to

	understand the Principles of marketing management, market segmentation, Product life cycle, Pricing, Branding etc.
Basic Numerical Skills	It makes the students to analyze the statistical data in an organization. They learn various techniques to organize for calculating profit and risk.
General Informatics	The student will enable the knowledge of Information technology, software and Hardware, Internet computer basics etc
Business Regulations	On successful completion of this course, the student should be well-versed in basic provisions regarding legal frame work governing the business world. To inculcate knowledge on various laws relating to business such as law of contract, law of sale of goods, law of agency, Negotiable Instruments Act etc. and Making students to know about laws in insurance sector
Corporate Accounting	This course aims to enlighten the students on the accounting procedures followed by the Companies.
	To enable the students to be aware on the Corporate Accounting in conformity with the provision of the Companies Act.
E-Commerce	This paper empower the students to access e-commerce requirement of a business and developing E-plants etc.
Entrepreneurship Development	The student enable entrepreneurship development skills, and able to start new venture.
Banking and Insurance	To enlighten the students' knowledge on Banking Regulation Acts. After the successful completion of the course the student should have a thorough knowledge on Indian Banking System and Acts pertaining to it.

Cost Accounting	To keep the students conversant with the ever – enlarging Frontiers of Cost Accounting knowledge. After the successful completion of the course the student should have a thorough knowledge on the cost accounting principles and the Methods of accounting cost and knowledge of Cost sheet, Material issues, Labour cost.
Quantitative Techniques for Business	To inculcate knowledge on demonstrate understanding of basic concepts of statistics embedded in their course. The objective of this paper is to provide an understanding for the graduate business student on statistical concepts to include measurements of location and dispersion, probability, probability distributions, sampling, estimation, hypothesis testing, regression, and correlation analysis, multiple regression and business / economic forecasting
Accounting for Management	This course aims to develop an understanding of the conceptual framework of Management Accounting. After the successful completion of the course the student acquires the knowledge in the Management Accounting Techniques in business decision
Business research Methods	On successful completion of this course the student are enabled with the Knowledge in Research methods. They possessed the ability to conduct the research which helps them in their career.
Human Recourse Management	On Successful Completion of this subject, the students should have understood the functions of Human Resource /Personnel Department, Manpower planning, performance appraisal, Salary administration, Labour Welfare, Industrial Relations etc.
Financial Reporting	To develop an understanding of the various forms of reporting (other than financial statements) and accounting for special transactions, and apply such knowledge in problem solving.
Financial Management	This course enables the students with the knowledge about the capital budgeting, Working capital, Cash management, and Better financial management techniques

Income Tax Law and Practice	This course aims to provide an in-depth knowledge on the provisions of Income Tax. To familiarize the students with recent amendments in Income-tax. On successful completion of this course, the student should be well versed in the prevailing Act.
Auditing	This paper gives the knowledge of examines the principles and practices of internal and external auditing. The students can capable to understand the auditing as a component of recurrent and strategic activities, risk assessment, internal control, systems evaluation, forensic accountability, and contemporary audit issues and challenges.
Financial Market and Services	Through this paper the students learn about various financial Institutions like Stock Exchange, Mutual Funds and their functioning etc.
Fundamentals of Investment	The students will be enabled with knowledge of portfolio management, Portfolio analysis.
Project (Three weeks Project and Viva voce)	This gives practical exposure in the Project work, knowledge which will equip the students in Research work.

Mcom Finance

Programme Outcome, Programme Specific Outcome and Course Outcome

M. Com	
Programme Outcome	This program could provide well trained professionals for the Industries, Banking Sectors, Insurance Companies, Financing companies, Logistics, distribution channel management, Application of Information technology in Business, Alternative investment management technique etc., to meet the well trained manpower requirements. The graduates will get hands on experience in various aspects acquiring skills for Marketing Manager, Sales Manager, Bank manager, Cost accountant, Academicians, Project management, Research Analysts, and Over all Administration abilities of the Company.
Programme Specific Outcome	The students should possess the knowledge, skills and attitudes during the end of the M.com degree course. By virtue of the training and curriculum, they can become an Managers, Accountants, Cost Accountants, Bank Managers, Auditors, Company Secretaries, Teachers, Professors, Stock Agents, Government jobs etc.,
Course Outcomes	
Course	**Outcomes**
Business Environment	This paper helps the students to understand the environment of enterprises, factors affecting business and fund raising in business. Understand how, as a result of internal and external factors, small business owners make operational decisions that have consequences for the success of their business.

Quantitative Technique for Business Decisions	This course aims to acquaint the students with the important statistical techniques for managerial decision making and to make the students learn the process of using statistical tools for validating findings and interpreting statistical results.
Accounting for Managerial Decision	This course aims to develop an understanding of the conceptual Framework of Management Accounting. After the successful completion of the course the student acquires the knowledge in the Management Accounting Techniques in business decision making.
IT Application in Commerce	This course enable the Student to plan and develop spreadsheets that can analyze, manipulate and provide solutions to the types of questions that arise within the working environment from a variety of data sources and to create databases to provide information for decision making
Organizational Theory and Behaviour	The students understand how people act, think, and feel in organizational settings the organizational etiquettes, group behaviour, leadership qualities and analyzing the attitude of the employees. They also understand how to Develop Good Leaders.
International Business	The students acquire the knowledge about the Foreign trade, Foreign exchange, etc. Through this paper the students understand different dimensions of international business. They understand how Govt. operates the Business with the policies. Students understand top world organization and their role between various countries.
Advanced Corporate Accounting	This course aims to enlighten the students on the accounting procedures followed by the Companies. To enable the students to be aware on the Corporate Accounting in conformity with the provision of the Companies Act.
Business Communication	On successful completion of this course the student are enabled with good communication skill and also they learn to develop their personality.

Management Science	On successful completion of this course the student are enabled with the use of Operation Research tools for business decision
Strategic Management and Corporate Governance	The course emphasizes the value and process of strategic management. In addition to familiarizing students with new subject matter, students are expected to integrate and apply their prior learning to strategic decision making in organisations.
Financial Markets and Institutions	Through this paper the students learn about various financial Institutions like Stock Exchange, Mutual Funds and their functioning etc.
Income Tax Law and Practice	This course aims to provide an in-depth knowledge on the provisions of Income Tax. To familiarize the students with recent amendments in Income-tax. And Assessment of Individual and Hindu Undivided Family, Firms, Companies Computation of Tax Payable, On successful completion of this course, the student should be well versed in the prevailing act and to understand the Principles of Direct and Indirect Taxes, Calculation of Tax, Tax Authorities, Procedure
Research Methodology in Commerce	On successful completion of this course the student are enabled with the Knowledge in Research methods. They possessed the ability to conduct the research which helps them in their career.
Financial Management	This course enables the students with the knowledge about the Capital budgeting, Working capital, cash management, and better financial management techniques.
Security analysis and Portfolio Management	The students will be enabled with knowledge of portfolio management, Portfolio analysis.
Financial Derivatives and Risk Management	The students will be enabled with knowledge of portfolio management, Risk hedging, derivatives.
Cost Management	To keep the students conversant with the ever – enlarging Frontiers of Cost Accounting knowledge. After the successful completion of the course the student should have a thorough knowledge on the

	cost accounting principles and the Methods of accounting cost and knowledge of Cost sheet, Material issues, Labour cost.
Strategic Financial Management	The student will enable the knowledge of Strategic financial management tools for decision making
Tax Planning and Management	The student will enable the knowledge of tax planning and tax management tools.
Project Work & Viva-Voce	This gives practical exposure in the Project work, knowledge which will equip the students in Research work.

Programme Outcomes
➢ To understand the importance and applications of E- Commerce ➢ To familiarize the students with the concepts, models, strategies of E- commerce, Electronic Payment Systems and E-Commerce Security ➢ To identify and developing effective work habits, health, safety and security and risks and their type and organizational dynamics, retail talents of the students. ➢ To develop necessary skills in verbal and non verbal communication ➢ To equip the students effectively to acquire required skills to manage business communication as also to use electronic media for business communication. ➢ The objective of this paper is to help students to acquire basic knowledge of the business communication and professional skills to impart skills for dealing with various kinds of business communications. ➢ To develop confidence, energy and focus, the students need to become a successful retail sales professional ➢ To identify essential ingredients to meet successful sales and handle different retail sales situations
✓ To enable the students to acquire knowledge of preparing financial statements ✓ To enable the students to acquire knowledge about accounting standards and to understand corporate accounting methods ✓ To acquaint the students with the basic ideas of logistics management ✓ To develop an understanding of the role of logistics in a market oriented society. ✓ To examine the major functions of logistics and role of IT in logistics ✓ To familiarize with models and theories of consumer behaviour and marketing research procedures ✓ To examine the concepts and techniques involved in understanding retailer shopping behaviour ✓ To learn how to communicate with customers in a positive manner

- ✓ To learn how to deal with a customer to become a buyer
- ✓ To give practical training in self-introspection and stress management
- ✓ The student will attach himself with a Retail organisation approved by the Department for a period of 2 weeks for industry training. The student should actively participate in the operations of the organization and should work like any other employee of that organization. He/ she should do a project work for the organization and the report should be submitted to the organization and the department. The student has to face a viva based on his report

Name of the programme	Programme outcome
B.voc Retail Management	This program could provide well trained professionals for the retail sector and business industries. The course facilitates soft skill development, enhances the awareness in retail management, business leadership and techniques

Name of the programme	Name of the course	Course outcome
B.voc retail Management	INTRODUCTION TO RETAIL STORE OPERATIONS- HEALTH SAFETY, SECURITY, TEAM &ORGANIZATIONAL DYNAMICS	• Understand the Evolution of Retail • Understand the overview of Retail Industry in India • Explain Organized and Unorganized Retail Sector
		• To Understand Store Merchandise Handling To Explain Basics of Visual Merchandising
	BASIC BUSINESS COMMUNICATION SKILLS	• List important aspects that must be considered for written communication • Know about the importance of maintaining confidentiality in communication • Identify different objectives and functions of communication Learn about the various benefits of communication for employees in an organization
	LAB ON BUSINESS COMMUNICATION SKILLS(P)	• To improve the communicative ability. • To enhance the general conversational skills in different socio-cultural contexts To expose the students to various business spoken skills.

	LAB ON RETAIL SELLING SKILLS-1(P)	Students will be able to understand various selling Techniques
	RETAIL LOGISTICS MANAGEMENT	• Acquire critical thinking and problem-solving skills applicable to distribution management practice or issues. • To develop ability to apply principles and practices of logistics management in real business applications of retail industry.
	RETAIL SHOPPER BEHAVIOR	• Identify the various models of buying processes. • List various aspects involved in demonstration and where product demonstration can be performed
	INTERNSHIP/PROJECT	operating processes and their

	significance in running retail Operations smoothly. It also helps develop necessary skills for planning, monitoring and controlling merchandise in a retail store.
BASIC NUMERICAL METHODS	• Derive numerical methods for various mathematical operations and tasks, such as interpolation, differentiation, integration, the solution of linear and nonlinear equations, and the solution of differential equations. Analyze and evaluate the accuracy of common numerical methods.
PROFESSIONAL BUSINESS SKILLS	• Identify the role and types of teams in workplace communication. • Understand strategies for working in collaborative projects. • Evaluate best practices in workplace etiquette.

FINANCIAL ACCOUNTING	• Know and apply accounting and finance theory. • Explain and apply international accounting standards. • Critically evaluate financial statement information. • Evaluate and compare different Investments
PERSONALITY AND SOFT SKILLS DEVELOPMEN	• Develop and exhibit and accurate sense of self. • Develop and nurture a deep understanding of personal motivation. • Develop an understanding of and practice personal and professional

	responsibility. • Demonstrate knowledge of personal beliefs and values and a commitment to continuing • personal reflection and reassessment.
STORE DISPLAY AND VISUAL MERCHANDISING	• Understand the need and importance of Store Hygiene and Cleanliness • Explain the various elements of Store Hygiene and Cleanliness • Analyze effective ways to improve visual effects • Learn about the company policies on Visual Design
COMPUTERISED ACCOUNTING (p)	• Operate the general ledger, account receivable, accounts payables, payroll, inventory and services. • Plan and design a simple automated system from a manual set of books.
LAB ON STORE DISPLAY AND CUSTOMER SERVICE(p)	• Practical experience on store display and visual merchandising
ENTREPRENEURSHIP DEVELOPMENT	• Understand the nature of entrepreneurship. • Understand the function of the entrepreneur in the successful, commercial application of innovations. • Confirm an entrepreneurial business idea. • · Identify personal attributes that enable best use of entrepreneurial opportunities.

BANKING AND INSURANCE	• To learn a strong foundation of basic

	economic principles. • Understand business application of principles. • The students will learn the relevance of demand, supply, and price & market mechanism.
HUMAN RESOURCES MANAGEMENT	• Demonstrate an understanding of key terms, theories/concepts and practices within the field of HRM. • Demonstrate competence in development and problem-solving in the area of HR Management. Provide innovative solutions to problems in the fields of HRM.
ELEMENTS OF SALESMANSHIP	• Understand the role of the Salesperson in today's marketplace and the significance of building partnerships. • Explain the different elements involved in a successful sales presentation; including, building rapport, the prospect interview, the key benefits, handling objections and the close • Explore the role of Sales promotion, Databases, Advertising, Internet, Social Media as well as legal and Ethical issues involved in the Sales process.
RETAIL ADVERTISING AND SALES PROMOTION	• Understand the place and contribution of marketing to the business enterpris • Understand fundamental marketing concepts, theories and principles in areas of marketing policy; of market and consumer

	behavior; of product, distribution, promotion and pricing decisions Understand the role of marketing as a fundamental organizational policy process

COMPUTER PRACTICAL- I (MS OFFICE) (p)	• Provide hands-on use of Microsoft Office 2013 applications Word, Excel, Access and PowerPoint. • Completion of the assignments will result in MS Office applications knowledge and skills. - Provide foundational or "computer literacy" curriculum that prepares students for life-long learning of computer concepts and skills.
INTERNSHIP/PROJECT (Pr)	• Practical training on retail store
CONFERENCE AND EVENT MANAGEMENT	• Obtain a sense of responsibility for the multi-disciplinary nature of event management • Gain confidence and enjoyment from involvement in the dynamic industry of event management • Identify best practice in the development and delivery of successful conferences and corporate gatherings • Identify the key elements of a conference and the processes involved in venue selection, registration, catering, accommodation, transport, theming, security and entertainment • Identify management

	essentials such as developing budgets, critical paths, work breakdown structures, risk mitigation and contingency planning.
MALL MANAGEMENT	• The student will be able to comprehend the mall architecture and mall project handling. • Selecting the mall locations and identify the catchment areas
R E T A I L P L A N N I N G	• The student will be able to deal marketing strategies in the retail sector • Gain the knowledge about the legal compliances in this retail sector • The student will get the ideas and strategies to maintain mall management sector
RETAIL TARAGETS AND LOCATIONS	• Identifying the customers taste and preferences • A wide range of knowledge about choosing the store location

RETAIL DISTRIBUTION MANAGEMENT, STORES LAYOUT &DESIGN	• Understand the different perspective methods of marketing in wholesale and retail sector • Student can understand how to make store design depends upon marketing segmentation
COMPUTER PRACTICAL- II (MS OFFICE)(P)	A. Practical knowledge about MS Excel
LAB ON ADVERTISEMENT AND SALES PROMOTION(P)	• Practical knowledge about sales promotion • Student can able to make different

	method which useful for sales promotion B.
MAJOR INTERNSHIP	• The major idea for internship is to implement the things learned and to get a real life experience.

2.6 Student Performance and Learning Outcome

Name of the programme	**Programme outcome**	
M.Com	This program could provide well trained professionals for the Industries, Banking Sectors, Insurance Companies, Financing companies, Logistics, distribution channel management, Application of Information technology in Business, Alternative investment management technique etc., to meet the well trained manpower requirements. The graduates will get hands on experience in various aspects acquiring skills for Marketing Manager, Sales Manager, Bank manager, Cost accountant, Academicians, Project management, Research Analysts, and Over all Administration abilities of the Company.	
Name of the programme	**Name of the course**	**Course outcome**
M.Com Finance	Business Environment	This paper helps the students to understand the environment of enterprises, factors affecting business and fund raising in business. Understand how, as a result of internal and external factors, small business owners make operational decisions that have consequences for the success of their business
	Quantitative Technique for Business Decisions	This course aims to acquaint the students with the important statistical techniques for managerial decision making and to make the students learn the process of using statistical tools for validating findings and interpreting statistical results.
	Accounting for Managerial Decision	This course aims to develop an understanding of the conceptual Framework of Management Accounting. After the successful completion of the course the student acquires the knowledge in the Management Accounting Techniquesin business decision making.
	Corporate governance and Business ethics	This course enable the Students to know the different committees of corporate governance and Board of directors, It also covers the aspects of business ethics
	Organizational Theory and Behaviour	The students understand how people act, think, and feel in organizational settings the organizational etiquettes, group behaviour, leadership qualities and analyzing the attitude of the employees. They also understand how to Develop Good Leaders
	International Business	The students acquire the knowledge about the Foreign trade, Foreign exchange, etc. Through this paper the students understand different dimensions of international business. They understand how Govt. operates the Business with the

		policies. Students understand top world organization and their role between various countries
	Advanced Corporate Accounting	This course aims to enlighten the students on the accounting procedures followed by the Companies. To enable the students to be aware on the Corporate Accounting in conformity with the provision of the Companies Act.
	Management Science	On successful completion of this course the student are enabled with the use of Operation Research tools for business decision
	Strategic Management	The course emphasizes the value and process of strategic management. In addition to familiarizing students with new subject matter, students are expected to integrate and apply their prior learning to strategic decision making in organisations.
	Financial Markets and Institutions	Through this paper the students learn about various financial Institutions like Stock Exchange, Mutual Funds and their functioning etc
	Income Tax Law and Practice	This course aims to provide an in-depth knowledge on the provisions of Income Tax. To familiarize the students with recent amendments in Income-tax. And Assessment of Individual and Hindu Undivided Family, Firms, Companies Computation of Tax Payable, On successful completion of this course, the student should be well versed in the prevailing act and to understand the Principles of Direct and Indirect Taxes, Calculation of Tax, Tax Authorities, Procedure
	Research Methodology in Commerce	On successful completion of this course the student are enabled with the Knowledge in Research methods. They possessed the ability to conduct the research which helps them in their career.
	Financial Management	This course enables the students with the knowledge about the Capital budgeting, Working capital, cash management, and better financial management techniques.
	Security analysis and Portfolio Management	The students will be enabled with knowledge of portfolio management, Portfolio analysis.
	Project Work & VivaVoce	This gives practical exposure in the Project work, knowledge which will equip the students in Research work