Department of Education

Program Outcomes

- 1. Students gain a better understanding and wider perspectives on the theories and principles of the subject which are applicable in various walks of life. They develop the knowledge, skill and attitude necessary to be an active and useful member of the society.
- 2. Students possess a sense of accountability and responsibility which will help them indeveloping healthy relationships, problem solving skills and conflict resolutions.
- 3. Students demonstrate the knowledge of psychology and educational psychology and theability to communicate this knowledge to others.
- 4. Students develop an understanding of Indian and Western educational and philosophicalthoughts which plays a significant role in critical thinking, problem solving, ethical decisionmaking, effective communication and enhancing creativity.
- 5. Students develop skills to analyze currents issues and trends in education such aspopulation education, environment education, sex education and value-oriented education. These inculcate awareness in the learners.

Program Specific Outcomes

- 1. Students develop a precise idea about the subject Education, scope and aim of education, factors and different agencies of education (psychology, philosophy, sociology, etc).
- 2. Students develop detailed knowledge of organizations and regulating agencies of education.
- 3. Students learn the basic of Indian and Western Philosophy.
- 4. Students develop an understanding of various trends and issues in contemporary education.

Semester	Name of Paper	Course Outcomes
I	EDU 100: PSYCHOLOGICAL FOUNDATIONS OF EDUCATION	 Students understand the structure and functions of higher mental processes Students understand the meaning and scope of educational psychology Students gain the knowledge of the dimensions of growth and development Students understand personality and its approaches Students develop the knowledge of intelligence with its theories and creativity, the difference between intelligence and creativity.
I	EDU 101: SOCIOLOGICAL FOUNDATIONS OF	 Students understand the nature and scope of sociology of education Students understand the meaning and process of socialization Students understand the relationship between

	EDUCATION	culture, society and education
	EDUCATION	4. Students understand the concept, nature and
		<u> </u>
		agencies of socialization
		5. Students understand the relationship between
		education, social mobility and social
		stratification.
		1. Students understand the role of philosophy in
	EDU 103:	education
	PHILOSOPHICAL	2. Students understand some major schools of
II	FOUNDATIONS OF	philosophy and their contributions to
	EDUCATION	educational theory and practice
		3. Students understand the interdependence of
		philosophy and education and the
		development of humanity.
		1. Students understand the roles and functions of
		various organizations, regulating bodies etc
	EDU 104: ISSUES	concerning elementary and secondary education
II	AND TRENDS IN	2. Students develop the knowledge of basic issues
11	CONTEMPORARY	relating to elementary and secondary
	INDIAN EDUCATION	education
	INDIAN EDUCATION	
		3. Students come to know about the problems of
		education and their solutions
		4. Students are able to clarify various modern trends
		in education.

Department of English

Sl. No.	Semester	Course	Course Outcome
1	I	Major Paper I: Introduction to Literature - ENG 100 (4 Credits)	The students will be able to learn the important and seminal literary terms and forms and relate them to literature from different literary ages.
2	I	Major Paper-II: British Literature – I (Elizabethan, Restoration, 18th Century) ENG 101 (4 Credits)	The students will be able to link and distinguish between the varying genres of literature of the different periods of British Literature and will be able to identify and analyze different literary techniques and different genres in British Literature from the Elizabethan Age to the 18th Century.
3	I	Ability Enhancement Course - I: Communication Skills / ENG AEC: 1 (3 credits)	At the end of the course students are expected to acquire basic understanding of verbal and non –verbal communication skills to enhance their ability to communicate effectively in English.

4	II	Major Paper - I: World Literature : ENG 103 (4 credits)	To analyze and appreciate literary texts from different parts of the world and receive them in the light of one's own literary traditions and to comprehend analyze and interpret literary texts in their cultural contexts.
5	II	Major Paper - II : British Literature -II (Romantics, Victorians, 20th Century) ENG 104 (4 credits)	The student shall be able to link and distinguish between the varying genres of different ages and will be able to identify and analyze the literary techniques in different genres in British literature.
6	III	Major Paper - I : American Literature ENG 200 (4 credits)	The students shall critically engage with the complex nature of American society, given its journey from specific religious obligations and their literary transformations. They shall be able to explore and understand the nature of the relationships of human beings to other human beings and other life forms in relation to representative literary texts in various genres
7	III	Major Paper-II: Children's Literature : ENG-201(4 credits)	To examine the importance and relevance of children's literature by exploring three children's novels

Department of Geography

Semester	Course Code	Name of Course	Course Outcome
II	GEOG 100	Physical Geography	This module equips students with a comprehensive understanding of physical geography, emphasizing its role in deciphering Earth's dynamic processes. Students explore the discipline's scope and its interdisciplinary nature, appreciating how it underpins various geographical fields. They delve into theories surrounding the solar system's origin, including the Nebular Hypothesis and the Big Bang Theory, gaining insights into celestial body formation. The course elucidates Earth's movements, covering Plate Tectonics, Continental Drift, and Seafloor Spreading, crucial for interpreting the planet's evolving landscape. Additionally, students learn about Earth's interior structure, seismic activities, volcanic processes, and mineral formation, alongside the ocean floor's configuration, tides, currents, and salinity distribution.
	GEOG 101	Human Geography	Students will comprehend human geography's significance in human-environment interactions and spatial analysis. They will differentiate concepts like space, place, landscape, and region to analyze societal development. Understanding cultural regions and the global distribution of race, religion, and language will illuminate cultural diversity. Studying human adaptation to environments with respect to different environments will reveal cultural and environmental linkages. Analyzing population growth, density, and distribution, along with age and sex compositions, will deepen understanding of demographic trends. These skills will enable students to critically evaluate human-environment interactions and cultural diversity, vital for addressing global challenges and fostering sustainable development.
			This multidisciplinary syllabus is crucial for students as it provides a foundational understanding of Asia, Europe, and North

	GEOG 102 (MDC)	Regional Geography	America physical and human geography. Studying physiographic divisions offers insights into diverse landforms and regions, aiding comprehension of geological processes. Understanding continent climates is crucial for grasping environmental challenges and opportunities. Analyzing population distribution provides valuable insights into how societies adapt to and shape environments, highlighting the interconnectedness of geography, climate, and human activities. Overall, this syllabus helps students develop a holistic understanding of the complexities of Earth's physical and human landscapes.
II	GEOG 103	Geography of India	This syllabus provides a comprehensive understanding of geography of India, covering physical, population, economic, and social aspects. Its interdisciplinary approach highlights the interconnectedness of different factors. Realworld relevance makes learning engaging, as topics like climate, agriculture, and population distribution relate to Indian context. Analyzing urbanization, migration, and resource distribution develops critical thinking. Studying distribution by race, religion, language, and tribes promotes cultural awareness. This syllabus not only enhances students' knowledge but also prepares them for diverse career opportunities in geography and related fields.
	GEOG 104	Environmental Geography	This syllabus provides students with a thorough grasp of environmental geography, covering the definition, scope, and elements of the environment. Through the study of ecosystems, energy flow, and biogeochemical cycles, students attain a clear understanding of intricate environmental processes. Environmental issues and policies, make their studies more relevant. Analyzing these topics fosters critical thinking skills. Examination of biodiversity hotspots, national parks, and wildlife sanctuaries promotes conservation awareness. Ultimately, this syllabus equips students for careers in

			environmental science, conservation and management, establishing a strong foundation in environmental principles and practices.
III	GEOG 200	Climatology	The course offers a comprehensive understanding of climatology, including atmospheric composition, Earth's heat budget, air masses, wind circulation, cyclones, and monsoons. It examines climatic classifications, the impact of El-Nino and La-Nina, and addresses climate change and global warming. Students gain insights into weather patterns and environmental challenges, aiding in informed decision-making for environmental management and policy development.
	GEOG 201	Economic Geography	The course equips students with an understanding of economic activities and the characteristics of developed and developing countries. It covers primary activities like agriculture, forestry, fishing, and mining, as well as secondary activities such as manufacturing and industrial regions. Students learn factors influencing industry location, Weber's theory, and economic globalization, fostering analytical skills and global economic awareness.

Department of History

Programme Outcome

• Students will have the ability to apply historical methods to evaluate the past and how historians and others have interpreted it.

- Students will be able to demonstrate broad knowledge of historical events and periods and their significance.
- Students will be able to recognize how different individuals, groups, organisations, societies, cultures, countries and nations have affected history.
- Students will offer multi-causal explanations of major historical developments based on a contextualized analysis of interrelated political, social, economic, cultural and intellectual processes

Programme Specific Outcome

- By learning political processes, society, religion, culture, economy from the past periods of the world and utilized it for to avoid mistakes and for improvement for the present and future generations.
- Acquiring the importance and value of museums, library, archive for historical research skills and other items having historical values and understanding the benefits of maintaining it for the future generations.
- Developing a sense of patriotism and nationalism by understanding the struggles and thrives of our forefather.
- Developing critical thinking skills, and comprehensive job-oriented study. It prepares
 them to face all competitive exams for civil services, teachers, politicians, social
 workers etc

Course Code	Name of Course	Course Outcomes		
Hist 100	History of India from Post – Maurya to Gupta Period	 The course introduced to the students the richness of the Indian culture during the ancient period The Students can understand the basic concepts associated with the different aspects of sociocultural life. It inculcated among the students to analyze the emergence of the Gupta empires during the "classical age" in India to Identify and analyze the Buddhist and Vedic (Hindu) faiths and advent of Islam. 		
Hist 101	History of India upto Maurya Period	 The course introduced the elements of change and continuity in Indian history from the ancient period upto Maurya period. It inculcated the knowledge of the social, political and cultural development during the said period. 		

Hist 104	History of India- Regional Kingdoms and the Sultanate	The course introduced a comprehensive understanding on the relations between State and Regional powers, the Institutional and administrative structure during the Sultanate period, causes responsible for the decline of the Delhi Sultanate and establishment of Mughal empire.
Hist 105	History of Mizoram upto 1986	 The course introduced to the students the nature of historical development in Mizoram such as culture, customs, traditions and practices of the Mizo. It inculcated among the students the spirit of nationalism and the greatness of the traditional chiefs and their relations with the British
Hist 200	The Mughals and Early Modern India	 The course introduced to the students the establishment of Mughal Empire. It also inculcated knowledge on their works and measures if important Mughal rulers with special reference to Akbar to Aurangzeb.
Hist 201	Greece and Rome	 The course demonstrates an historical understanding of key episodes of Roman cultural and political history. It also imparted knowledge on ability to evaluate the usefulness and relevance of different types of historical or textual evidence and to construct a well-developed argument based on fragmentary historical and archaeological evidence.

Department of Political Science

Programme Outcome

After completing this program, students will have a practical understanding of the political systems of the state, the nation, and the world. In addition to identifying the fundamental components and philosophies of the Indian Constitution, they will study the history of its creation. In addition to these benefits, knowing various constitutions will help students analyze, interpret, and assess governmental events, trends, and structures. It will also

provide them a practical grasp of the most potent forces at play. In particular, Mizoram's political history will be taught, and students will comprehend the state's construction of municipal corporations as well as the dynamic shifts in Mizoram politics. Students will gain a critical understanding of the subject's philosophy and substance, evaluate government programs, and generate insights that are relevant to politicians, their peers, and global communities. Because of the knowledge they will gain from the course, they will be able to contribute to society as citizens and become valuable members of society.

Programme Specific Outcome

- 1. Through this course, the students of political science as well as those from the multidisciplinary course will gain specific expertise about the political interpretation.
- 2. Irrespective of subject continuity, it will aid in the development of broad abilities that students will use in their future project.
- 3. They will be able to achieve their particular objectives and find work as academicians, All India Service and Central Service, State Service, Judicial Service, Politicians, and other professions.

	I Semester				
Semester	Course	Course Outcome			
		After studying the course, students will be able to			
		critically analyze the topic and comprehend the			
DOLG/MI/100		fundamental ideas of political theory. For a deeper			
POLS/MJ/100	Political	comprehension of the subject, it will also give the			
(Major)	Theory	students a chance to become acquainted with modern			
		interpretations of the theories and opinions of			
		academics.			
POLS/MJ/101 (Minor)	Govt. & Politics of Mizoram	The political development of the state of Mizoram and the political history of Northeast India are introduced to students in this paper. Students would be familiar with Mizoram's political parties, both past and current, including their history, development, and accomplishments. The state's numerous local self-governments, both urban and rural, would also be introduced to the students. The study would shape the students a love and appreciation for their political heritage, an understanding of the importance of grassroots democracy, and an active participation in the			
		functioning of the great Indian democracy.			

Multidisciplinary POLS/MD/102	Introduction to the Constitution of India	The course introduces students to the key elements of the constitutions, political structures, and governmental structures of the world's most powerful nations. Additionally, it allows students to compare the democratic systems in India and other countries.
	,	II Semester
		Studying this course would impart knowledge about the
	Indian	Indian Constitution, the functions of different levels of
POLS/MJ/103	Govt. &	government, the issues and future of Indian federalism,
(Major)	Politics	and the dangers and difficulties facing Indian
		democracy.
POLS/MJ/104 (Minor)	Forms of Government	Students who take this course will learn how to distinguish between the three types of government, discern between the federal and unitary forms, and comprehend the parliamentary and presidential systems of governance. Additionally, the advantages and
		disadvantages of democracy and authoritarianism will be studied.

Department of Public Administration

Programme Outcome

The B.A in Public Administration provides students with the knowledge and experience needed to begin careers in the not-for-profit and public service sectors. The Public Administration Department is dedicated to provide a programme that will:

- 2. Develop the conceptual foundation requisite for success in public administration careers.
- 3. Establish the ability to function effectively in complex, culturally diverse organisational structures.
- 4. Promote student commitment to ethical standards of managerial practice.
- 5. Understand the basic concepts of public administration.
- 6. Have the research skills to critically analyze public administration issues and analyse managerial issues and policy recommendations.
- 7. Have the ability to communicate and interact productively with adverse and changing workforce and citizenry.

8. Be able to develop/formulate a public policy response to social or economic problem.

Specific Outcome

On the successful completion of the programme, the students will get comprehensive knowledge of public and private affairs, understand policy development, policy analysis, economic analysis, management skills and organization theory and application to public service. The programme will nurtures the analytical skills of the students in understanding, solving and synthesizing current social, economic and political situations. Completion of the programme opens avenues for the students in pursuing Masters Degree in Public Administration and pursuing their careers.

Sl.No.	Nameofcourse	Courseoutcome
1	Course-I:Elements of Public Administration	Oncompletionofthecourse, students are ableto: 1. Understand the meaning, nature, scope and significance of public administration, evolution of the discipline, difference between public and private administration. 2. Understand the different approaches to the public administration. 3. Understand the concept and structure of organization, headquarters and field relations. 4. Understand the various Principles and Forms of Organization. 5. Understand how control over public administration is exercised.
2	Course- II:Administrative Theory	Oncompletionofthecourse, the students are ableto: 1. Understand the meaning and significance of Administrative Theory and the general Ideas of Kautilya, Karl Marx, and VI Lenin on State and Administration. 2. Understand the classical theories of public administration like scientific management theory, Bureaucratic Organisation and theory of organizational principles. 3. Understand the various neo-classical theories of public administration 4. Understand the meaning and origin of behavioural theories of public administration. 5. Understandthemeaning and importance of comparative public administration.

3	Course- III: Public Administration in India	Oncompletionofthecoursethestudentareableto: 1. Understand the Constitutional settings of Indian Administration. 2. Understand the Central Administration and important offices in Indian Administration. 3. Havegeneralknowledgeaboutimportant Ministries in India. 4. Have general information about the Administration of UnionTerritories,Stateand District administration. 5. Have basic knowledgeaboutmajorissuesand institutions in Indian Administration.
4	Course-IV:Public Personnel Administration	Oncompletionofthecourse, the studentareableto: 1. Understand the concept, meaning, nature, scope of public administration and various types of personnel system. 2. Understand the meaning and importance of recruitment and the main features of system of recruitment for All India, Central and State services. 3. Understand the meaning and importance of Classification—rankand position classification. 4. Understand the meaning and importance of Conduct and Discipline and have general knowledge about conduct rules, disciplinary rules and rights of Civil Servants. 5. Understand the meaning and importance of retirement, its features and forms and the various retirement benefits of an entry of the student of the status of the status of the various retirement benefits of an entry of the status of the status of the various retirement benefits of an entry of the status of the status of the various retirement benefits of an entry of the status of the various retirement benefits of an entry of the status of the various retirement benefits of an entry of the status of the various retirement benefits of an entry of the various retirement benefits of th

Department of Chemistry

Programme Outcome

- 1. The curriculum of B. Sc. Chemistry is designed to provide the students a good understanding about the fundamentals and principles of the subject.
- 2. The syllabi of the B. Sc. Chemistry are discretely classified to give stepwise advancement of the subject knowledge in three years of the course term.
- 3. The practical exercises done in the laboratories impart the students the knowledge about various chemical reagents and reactions. Thereby, hone their skills of handling the corrosive, poisonous, explosive and carcinogenic chemicals making themselves employable in any kind of chemical industries. They are also trained about the adverse effects of the obnoxious chemicals and the first aid treatment.

4. The branches of Chemistry such as Organic Chemistry, Inorganic Chemistry, Physical Chemistry and Analytical Chemistry expose the diversified aspects of chemistry where the students experience a broader outlook of the subject.

Programme Specific Outcomes

- 1. The students will understand the existence of matter in the universe as solids, liquids, and gases which are composed of molecules, atoms and sub atomic particles.
- 2. Students will learn to estimate inorganic salt mixtures and organic compounds both qualitatively and quantitatively using the classical methods of analysis in practical classes.
- 3. Students will grasp the mechanisms of different types of reactions both organic and inorganic and will try to predict the products of unknown reactions.
- 4. Students will learn to synthesize the chemical compounds by maneuvering the addition of reagents under optimum reaction conditions.

Semester	Course Code	Course outcomes
		At the end of the course, the student will be able to:
I(Major)	Organic Chemistry-I	1. Learn the IUPAC nomenclature of Organic compounds
	CHEM/1/MJ/100	2. Understand the methods of laboratory preparations of different functional groups
		3. Learn the physical properties and general chemical reactions of important organic functional groups.
		At the end of the course, the student will be able to:
II(Major)	InorganicChemistry- ICHEM/1/MJ/101	1. Understand the structure of atoms and its stability
	TCTEIVI/1/NI9/101	2. Learn the general periodic properties of an element
		3. Understand the basic concepts of chemical bonding by different approach
		4. Establish the concept of red/oxidation to balance chemical equation.

		At the end of the course, the student will be able to:
I (MDC)	Chemistry in Everyday Life CHEM/1/MD/102	1. Learn synthesis and applications of various types of synthetic polymers and papers
		2. Learn different types of dyes and cosmetics and their applications
		3. Differentiate oils and fats and their identification
		4. Learn water soluble vitamins and their deficiencies.
		At the end of the course, the student will be able to:
II (Major)	InorganicChemistry- IICHEM/2/MJ/103	1. Learn the concept, nomenclature and isomerism in coordination chemistry
		2. Learn the chemistry of s and p block elements
		3. Learn elementary ideas regarding nuclear reactions and radioactivity
		4. Minimize error, test significance of their analytical data and correctly express their experimental data.
		At the end of the course, the student will be able to:
II (Major)	Physical Chemistry- ICHEM/2/MJ/104	1. Learn the difference between real and ideal gases and Laws governing deviations from ideal behaviour
		2. Learn types of liquid crystals and their important physical properties
		3. Learn types and chemistry of colloids and their properties and surface chemistry
		4. Learn concept of chemical kinetics and enzyme chemistry.
		At the end of the course, the student will be able to:
II (MDC)	Selected Topics in ChemistryCHEM/2/MD/105	1. Differentiate types of polymers, learn the importance of biodegradable polymers and know preparation and uses of commonly used polymers.
		2. know different types of dyes, pigments

		and food colours used in daily life
		3. Understand the basic principles of green chemistry and their applications in chemical reactions.
		At the end of the course, the student will be able to
		1. Understand laws of gases, and types of molecular velocities
III (Major)	Physical Chemistry- IICHEM/3/MJ/106	2. Acquainted with the concept of space lattice and unit cell and the laws of crystallography
		3. Know the laws of thermodynamics, concept and variation of entropy, Gibbs energy and chemical potential with physical variables.
	Lab work (Physical Chemistry- IP)CHEM(P)/3/MJ/107	At the end of the course, the student will be able to:
III (Major)		1. Determine surface tension, coefficient of viscosity, water equivalent, heat of neutralization and heat of dilution
		2. Determine indicator constant, concentration of solution, pH and dissociation constant.
		At the end of the course, the student will be able to:
III (Major)	Organic Chemistry- IICHEM/3/MJ/108	1. Know fundamental effects that governs the mechanisms of organic reactions, learn energy profiles and Reactive intermediates and general mechanism of substitution, addition, elimination, rearrangement reactions
		2. Acquainted with geometrical, optical and conformational isomerism of organic compounds
		3. Know arenes and aromaticity with special reference to benzene and its properties.
		4. Know different types of nucleophilic substitution reactions and elimination reactions.

		At the end of the course, the student will be able to:
		1. Learn the chemistry of food and its ingredients, food poisoning and adulteration.
III(MDC)	Chemistry For All CHEM/3/MD/109	2. Know cleansing action of soaps and detergents, and hardness of water
		3. Learn environmental impact non-renewable sources of energy such as Coal, Petroleum and natural gas and its alternative for clean energy such as Nuclear energy, solar energy and hydrogen.
		4. Acquainted with the mode of action, uses and side effects of common synthetic life-saving drugs.

Department of Mathematics

Programme Outcome

Students graduating with Bachelors of Science in Mathematics will:

- i. Acquire knowledge with facts and figures related to Mathematics.
- ii. Understand basic concept, fundamental principles and scientific theories related to various scientific phenomena and their relevance in day-to-day life.
- iii. Understand application of Mathematics in different fields.
- iv. Develop creative thinking to propose novel ideas in explaining facts and figures and providing solutions mathematical problems in variety of contexts.

Semester	Course Code	Name of the Course	Course Outcome
Ι	MAT/1/MJ/100	VECTOR ANALYSIS	This course enables the students to: ➤ determine and calculate areas of 2- Dimensional figure and volume of 3- Dimensional figure. ➤ study vector differentiation and integration in two- and three-dimensional spaces and consequently evaluatethe

			component of velocity and acceleration of a moving particlealong a space curve. ➤ get knowledge about space curves; directional derivative; gradient; multiple integrals; line and surfaceintegrals, vector fields; divergence, curl and flux. ➤ get basic knowledge of key topics to study tensor, Differential Geometry and Relativity theory for furtherstudies. This course helps the students to: ➤ sketch different types of graphs in Cartesian coordinate systems. Calculate the limit and examine thecontinuity of a function at a point and interval, uses of derivatives and successive differentiation.
	MAT/1/MJ/101*	CALCULUS	 ➤ understand the consequences of Rolle's and Mean value theorems for differentiable functions. Know theimportance of Taylor's and Maclaurin's expansions. ➤ know Fundamental theorem of integral calculus, evaluation of integrals using properties of definite integraland reduction formulae for standard integrals. ➤ understanding limits & continuity in two or more variables and their partial derivatives; Euler's theoremon homogeneous functions. Also to assimilate the notions of sequence and series and their convergence
II	MAT/2/MJ/150	ELEMENTARY NUMBER THEORY	This course enables the students to: ➤ know basic properties of integers and fundamental theorem of arithmetic. ➤ understand congruences in the set of integers. Eulers function, Fermat's theorem, Wilson's theorem, Lagrange's theorem and their applications. ➤ have a knowledge on Lagendre's symbol, Linear congruences, Chinese remainder theorem, congruence ofhigher degree modulo, Gauss lemma. ➤ understand Fibonacci numbers and their properties. Learn about various type of functions. Mobius Inversionformula to solve equations.
	MAT/2/MJ/151*	ALGEBRA	This course will enable the students to: understand properties of polynomials over interger, rational, real and complex field

	 and their irreducibility. understand the importance of roots of real and complex polynomials and learn various methods of obtainingroots. employ De Moivre's theorem in a number of applications to solve numerical problems. enable to solve cubic and biquadratic equations by Cardan's method.
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Department of Physics

Program Outcomes

- 1. The syllabi are planned in such a way to correlate the higher secondary level and the Post graduate levels of Physics to correlate a logical framework in almost all the branches of Physics.
- 2. The syllabi are designed so that students should have knowledge in Mathematical Physics, Electricity Fundamentals, Mechanics, and Properties of matter & Oscillation, Basic Electronics at the end of 1st and 2nd semester,. In addition to that a multidisciplinary (MDC) papers have been introduced in 1st and 2nd semesters for those students who opted MDC other than Physics Major/Minor students. The MDC covers the basic Physics like Newtonian mechanics, scientific theory evolves over the time, basic knowledge of our universe, multi-verse theory and fine-tuning theory.
- 3. For the 1st and 2nd semesters, there are no practical classes, but basic concepts are given on various techniques to get acquainted, which commence from 3rd semester.

Programme Specific outcomes

- 1. After completion of program, the students gathered knowledge of basic concepts in Physics.
- 2. It is often said, 'Mathematics are the language of Physics'. Keeping in view a separate paper on 'Mathematical Physics I' has been introduced. In addition to that emphasize are given on Electricity, Properties of matter & Oscillations and Basic Electronics.

- 3. Students are also taught to develop written and oral communication skills in communicating physics-related topics.
- 4. Basic theoretical concepts are given how to design and conduct experiment in Electricity and Electronics in 1st and 2nd Semester. These two topics are being taught to make understanding of electrical and electronics circuit before commencement of Practical classes in 3rd semester.
- 5. Students are taught to develop an understanding of the impact of Physics on society and they gather conceptual understanding of Physics in real life. Keeping in view, Physics for All (Multidisciplinary course) has been introduced.
- 6. Later, semester's students will be assigned project works through supervisors and they will be exposed to one research area preferably of their own choice.

Sl. No.	Course No.	Learning Outcomes
	PHY 100 (Major) Mathematical Physics-I	Revision the knowledge vector, vector Calculus and matrices. These basic mathematical structures are essential in
1.	 Vector Algebra Vector Calculus Vector Integration Coordinate Systems Matrices 	solving problems in various branches of Physics. 2. To learn the curvilinear coordinates which have applications in problems with spherical and cylindrical symmetries and
	6. Beta and Gamma functions	beta-gamma functions and their application in solving special integrals.
2.	PHY101(Major/Minor) ElectricityFundamentals 1. Electrical Circuits 2. Magnetic Circuits 3. AC Circuits 4. Electrical machine	 To revise knowledge about electric current, current density, Ohm's law, Kirchoff's law and combination of resistors. To understand magnetic effect of current and electromagnetic induction. Application of phasor rules to analyses AC circuits consisting of parallel and/ or series combinations of voltage source and resistors and to understand the basic workings of common electrical appliances.
3.	PHY (Multidisciplinary) Physics for All 1. Newtonian Mechanics 2. Evolution of Universe 3. Many Worlds Interpretation and Fine Tuning	 To understand the foundation of fundamental Newtonian Mechanics. To understand how scientific theory evolves over the time. To have basic knowledge of our universe and how it evolves. To acquire basic idea of multiverse theory and fine-tuning theory.
1.	PHY 160 (Major) Mechanics, Properties of Matter & Oscillation	 To understand laws of motion and their application to various dynamical situations. To understand the analogy between translational and rotational dynamics,

	 Laws of motion Gravitation Centre of mass Rigid body motion Elasticity Kinematics of moving fluids Harmonic oscillations Free and forced vibrations 	collisions and STR. 3. To understand the concept of Elasticity and equations governing fluid dynamics. 4. To explain the phenomena of simple harmonic motion and the properties of systems executing such motions.
2.	PHY (Major/Minor) Basic Electronics 1 Semiconductors Diodes 2. Transistors 3. Amplifiers 4. Oscillators	 Understanding N- and P- type semiconductors, mobility, drift velocity, fabrication of P-N junctions Application of PN junction for different type of rectifiers and voltage regulators, special diodes. Understanding NPN and PNP transistors and basic configuration, current and voltage gain. Biasing and equivalent circuits, coupled amplifiers and feedback in amplifier and oscillators. Working of CRO
3.	PHY 110 (Multidisciplinary) Physics for All 4. Newtonian Mechanics 5. Evolution of Universe 6. Many Worlds Interpretation and Fine Tuning	 To understand the foundation of fundamental Newtonian Mechanics. To understand how scientific theory evolves over the time. To have basic knowledge of our universe and how it evolves. To acquire basic idea of multiverse theory and fine-tuning theory.

Department of Zoology

Program Outcome

The NEP & Choice Based Credit System for Under Graduate (UG) Curriculum for B.Sc. Zoology Programme envisages undergraduate education as a combination of general and specialized education with outcome based, simultaneously introducing the concepts of breadth and depth in learning. Besides recalling information, the learning process is aimed to acquire the ability for problem solving, and critical and creative thinking in students. The present attempt is to prepare the students for lifelong learning by drawing attention to the vast world of knowledge of animals and introducing them to the methodology of systematic

academic enquiry. The crew of the syllabus ensures firm footing in fundamental aspects of Zoology and wide exposure to modern branches of Zoology to the students.

Programme Specific Outcomes

The scientific study of kinds and diversity of organisms and of any and all relationships among them. i.e. taxonomy, identification, classification and nomenclature and all other aspects of dealing with different kinds of organisms and data accumulated about them. Gain knowledge about the biology of different vertebrates & invertebrates & their unique behaviours and key biological issues. To have a comprehensive study of the biological properties of organisms based on evolutionary principles, their adaptive behaviours & survival strategies. Contributes the knowledge for Nation building.

Semester	Name of Paper	Learning Outcome
I	ZOO/MJ/100 – Systematics &Fundamental Concepts	Understanding of the basics of zoological studies on classification, historical development, major concepts and applications.
I	ZOO/MJ/101 – Non-chordate Biology	Course outcome: Upon completion of the course, students should be able to know the importance of systematics, taxonomy and structural organization of animals. Appreciate the diversity of non-chordates living in varied habit and habitats.
II	ZOO/MJ/103 – Evoution& Ethology	Course outcome: Comprehension of the biological properties of organisms based on evolutionary principles, their adaptive behaviours & survival strategies.
II	ZOO/MJ/104 – Chordate Biology and wildlife	Course outcome: Knowledge on the fundamental nature and diversity of the ife forms among the chordates, their unique behaviours and key issues.

Department of Bachelor of Computer Application

Program Specific Outcome

- Computer application graduates will apply their knowledge and skills to succeed in their career/ professional development and/or postgraduate education to pursue flexible career paths amidst future technological changes.
- Our graduates will apply basic principles and practices of computing grounded in mathematics and science to successfully complete hardware and/or software related engineering projects to meet customer business objectives and/or productively engage in research.
- Our graduates will demonstrate a sense of societal and ethical responsibility in their professional endeavors, and will remain informed and involved as full participants in our profession and our society.
- Our graduates will demonstrate strong communication skills and the ability to function effectively in multi-disciplinary teams.

- Our graduates will demonstrate strong bonding in team and display distinct leadership traits.
 - Our graduates will be prepared for civil service as well as public service examination.

Program Outcome

- Students to have knowledge and expertise in at least one procedure-oriented and object-oriented programming language.
- Students to have a wide perspective on software development including web-based applications as well as graphic applications.
 - Students to have the familiarity with Desktop Publishing system.
- Students to have the ability to design and implement optimal databases using current technologies.
- Students to have understanding of design and working principles of the digital electronics.
- Students will be able to design and analyze algorithms as per need by relating the data structure and algorithms.
- Students will be able to identify and describe the communication networks technologies in local area networks and the Internet and countermeasures for security threats.
- Students will be aware of the design principles of Operating Systems specializing on at least one popular Operating System.
- Students will have understanding of various legislative acts and articles related to information technologies and international initiative in the field of IT laws.
- Students will be able to solve simple computational problems involving mathematical structures and processes.
- Students will have the concepts regarding the architecture and organization of a computer system.