Subject prerequisite

To study Zoology in undergraduate, a student must have studied Biology,

Biotechnology or Life Science in Class 12.

Programme Objectives (POs)

- 1. The programme has been designed in such a way so that the students get the flavour of both classical and modern aspects of Zoology/Animal Sciences. It aims to enable the students to study animal diversity in Indian subcontinent, environmental science and behavioural ecology.
- 2. The modern areas including cell biology and genetics, molecular biology, biochemistry, physiology followed by biostatistics, Evolutionary biology, bioinformatics and genetic engineering have been included to make the study of animals more interesting and relevant to human studies which is the requirement in recent times.
- 3. The lab courses have been designed in such a way that students will be trained to join public or private labs.

Certificate Course in Medical Diagnostics & Public Health		
B.Sc I Programme Specific Outcomes (PSOs)		
PSO1	This course introduces System Biology and various functional	
	components of an organism. Emphasis will be on physiological	
	understanding abnormalities and anomalies associated with white blood	
	cells and red blood cells. The course emphasizes cell identification, cell	
	differentiation and cell morphology evaluation procedures. This will	
	enhance hematology analytical skills along with skill of using many	
	instruments.	
PSO 2	The students will learn the basic principles of genetics and how to	
	prepare karyotypes to study the chromosomes.	
PSO 3	How chromosomal aberrations are inherited in humans by pedigree	
	analysis in families.	
PSO 4	The students will have hands-on training in the techniques like	
	microscopy, centrifugation and chromatography, and various	
	biochemical techniques, preparation of slides which will help them in	
	getting employment in pathology labs and contribute to health care	
	system.	
PSO 5	The Certificate courses will enable students to apply for technical	
	positions in government and private labs/institutes.	

Diploma in Molecular Diagnostics and Genetic Counselling		
B.Sc II Programme Specific Outcomes (PSOs)		
PSO1	The student at the completion of the course will be able to have a detailed and conceptual understanding of molecular processes <i>viz.</i> DNA to trait. The differential regulation of genes in prokaryotes and eukaryotes leads to the development of an organism from an embryo.	
PSO 2	The students will be able to understand and apply the principles and techniques of molecular biology which prepares students for further career in molecular biology. Independently execute a laboratory experiment using the standard methods and techniques.	
PSO 3	The principles of genetic engineering, gene cloning, immunology and related technologies will enable students to play an important role in applications of biotechnology in various fields like agriculture, forensic sciences, industry and human health and make a career out of it. Students can have their own start-ups as well.	
PSO 4	The basic tools of bioinformatics will enable students to analyze large amount of genomic data and its application to evolutionary biology. Apply knowledge and awareness of the basic principles and concepts of biology, computer science and mathematics existing software effectively to extract information from large databases and to use this information in computer modeling.	
PSO 5	The Diploma courses will ensure employability in Hospitals/Diagnostics and Pathology labs with good hands-on training. It will also enable students to take up higher studies and Research as their career and work in renowned labs in the country and abroad.	

Degree in Bachelor of Science		
B.Sc III Programme Specific Outcomes (PSOs)		
PSO1	 This programme aims to introduce students to animal diversity of invertebrates and vertebrates. The students will be taught about invertebrates and vertebrates using observational strategies, museum specimens and field reports. 	
PSO 2	• A variety of interacting processes generate an organism's heterogeneous shapes, size, and structural features.	
PSO 3	 Inclusion of ecology and environmental sciences will enrich students with our world which is crucial for human well being and prosperity. This section will provide new knowledge of the interdependence between people and nature that is vital for food production, maintaining clean air and water, and sustaining biodiversity in a changing climate. 	
PSO 4	 Students will also come to know about the basic principle of life, how a cell divides leading to the growth of an organism and also reproduces to form new organisms. 	
PSO 5	 The basic concepts of biosystematics, evolutionary biology and biodiversity will enable students to solve the biological problems related to environment. 	
PSO 6	 At the end of the course the students will be capable enough to comprehend the reason behind such a huge diversity of animals and reason out why two animals are grouped together or remain separate due to similarities and differences which exist at many levels along with ecological, environmental and cellular inputs. 	
PSO 7	• The Degree courses will enable students to go for higher studies like Masters and Ph.D in Zoology and Allied subjects.	