

## **Department of Zoology**

### **POs/COs/PSOs**

#### **Program Specific Outcomes**

Understand the nature and basic concepts of cell biology, genetics, taxonomy, physiology, Biochemistry, Microbiology, Biotechnology, ecology and applied Zoology.

#### **Program Outcome**

After completing and graduating with a degree in Zoology, the students have a wide scope in different fields. Apart from pursuing for higher studies (master in the subject with specialization in different branches in Zoology), the students can also opt from a variety of related branches of science: Related paramedical fields such as health sciences, Agricultural sciences and Master in Forestry, Master in Food technology and Processing, Wildlife officers, Marine Biologist, Professional field such as Poultry, Sericulture, apiculture, Pisciculture, dairy etc.

#### **Course Outcome**

##### **BSc 1<sup>st</sup> Year**

<b>PAPER - I</b> (paper code – ZOOL-1T) (ANIMAL DIVERSITY: non-chordata and chordate; comparative anatomy and physiology of non-chordates)	Learn about the importance of systemic, taxonomy and phylogeny to get a concrete idea of evolution of non-chordate phyla Understand the various morphological, and anatomical structures and functions of various animals in human welfare. Get the knowledge about economic, ecological and medical significance of various animals in human welfare Understand the important parasites and their control measures Comparison of the anatomy and physiology of the different taxa of non chordates.
<b>PAPER - II</b>	Understand the basic structure, functioning of cell and cell organelles and

<p>(paper code – ZOOL-2T) (Cell Biology, Histology and Comparative Anatomy and physiology of Chordates)</p>	<p>understand the intricate cellular mechanisms involved.</p> <p>Understand the tissues, how tissues are produced from cells in the normal course and about any malfunctioning which leads to benign or malignant tumors.</p> <p>Develop an understanding of the evolution of vertebrates thus integrating structure, function and development.</p> <p>Understand the morphological, anatomical and physiological adaptations in diverse habitats.</p> <p>Develop an understanding of the evolution of vertebrates thus integrating structure, function and development.</p>
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### BSc 2<sup>nd</sup> Year

<p><b>PAPER - I</b> (Paper Code - 0863) (Anatomy &amp; Physiology)</p>	<p>Understanding of Comparative Anatomy of various organ systems of vertebrates.</p> <p>Understanding of various physiology aspects of organ system-circulation system, nervous system, digestive system, reproductive system etc. in vertebrates</p>
<p><b>PAPER - II</b> (Paper Code - 0864) (Vertebrate Endocrinology, Reproductive Biology Behaviour, Evolution &amp; Applied Zoology)</p>	<p>Understanding of endocrine system, synthesis, regulation and function of hormones.</p> <p>Understanding types of hormone receptors and hormone mediated cell signaling.</p> <p>Understanding reproductive cycle, pregnancy, parturition, gametogenesis and extra-embryonic membrane in mammals</p> <p>Understanding of animal behavior</p> <p>Understanding the various theories of evolution and evidences</p> <p>Understanding of the life cycle of commercially reared animals-apiculture, sericulture, Aquaculture, Pisciculture, Poultry keeping.</p> <p>Knowing the basics of biological and chemical pest control</p>

### BSc 3<sup>rd</sup> Year

<p><b>Paper-I</b> (Paper Code-0917) (Ecology, Environmental-biology; Toxicology ; Microbiology &amp; Medical Zoology)</p>	<p>Recognizing the major ecosystems, communities, population, biogeochemical cycles, ecological succession and pollution.</p> <p>Understanding limiting factors, food chain, energy flow, conservation of natural resources &amp; Environmental impact Assessment.</p> <p>Ability to classify toxicants, principle, toxicology, types of toxic agents, animal poison and food poisoning.</p> <p>Ability to understand basics of microbiology and its application in industries and domestic water treatment.</p> <p>Understanding pathogenic micro-organisms, diseases, symptoms and treatment and vectors.</p>
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<p><b>PAPER-II</b> (Paper Code-0918) (Genetic's, Cell Physiology, Biochemistry, Biotechnology &amp; Biotechniques)</p>	<p>Ability to understand the basics of genetics and human genomics Have general idea of cell physiology-pH, cellular transportation and hydrolytic enzymes Understanding the types, synthesis, regulation and catabolism of protein, lipid and carbohydrates. Understanding the basics of biotechnology, DNA Recombination and its application &amp; method and tools of gene cloning.</p>
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