**PROGRAM SPECIFIC OUTCOMES**

**ZOOLOGY**

**PSO OF B.SC WITH ZOOLOGY**

**STUDENTS WOULD BE ABLE TO -**

**PSO1**  Understand basic concepts of classification, rules of nomenclature and structure of representative animals and functions of their organ systems.

**PSO2**  Develop knowledge of cell biology, physiological, embryological, evolutionary process and development of vertebrates.

**PSO3** Perform standard laboratory techniques to demonstrate and analyze procedures in the areas of Biochemistry, Biotechnology, Bioinformatics and Cytology.

**PSO4**  Observe and understand Nature, Environment, Biodiversity, Natural resources and take steps towards their conservation and take part in awareness programs.

**PSO5** Understand applications of biological sciences in culture of economically important animals, agriculture and medicine.

**COURSE OUTCOME OF B.SC ZOOLOGY**

**CO OF B.SC I YEAR ZOOLOGY PAPER I**

**TITLE- INVERTEBRATE**

**STUDENTS WOULD BE ABLE TO –**

**CO1** Classify and name animals on the basis of rules of nomenclature and taxonomy.

**CO2** Identify invertebrate representatives of Phylum Protozoa to Echinodermata and Hemichordata on the basis of structure.

**CO3**  Understand and know pathogenic Protozoa and Nematodes, diseases caused by them and insects as vectors of diseases.

**CO4** Identify larval forms of Crustacea, Mollusca and Echinodermata and understand the significance of Trochophore larva in evolution.

**CO5**  Gain knowledge of Minor Phyla and Hemichordates and understand affinities of Hemichordates.

**CO5** Develop practical knowledge of Invertebrates by museum study, and display of dissections by LCD as dissection of animals is banned.

**CO OF B.SC I YEAR**

**ZOOLOGY PAPER II**

**TITLE - CELL BIOLOGY & DEVELOPMENT**

**Students In Would Be Able To -**

**CO1** Differentiate between types of Microscopes,their structure and working and study types of cells and organelles by using them.

**CO2** Gain knowledge of cell division, cell differentiation, embryology, development and regeneration.

**CO3** Differentiate between normal and stem cells, Necrosis and Apoptosis.

**CO4** Develop practical knowledge of cytological,embryological and histological techniques and applied genetics.

**CO5** Identify chromosomes, genes and processes related to heredity , mutation and variations.

**CO6** Gain knowledge of genetic diseases of man, genetic code, genetic experimentations and DNA fingerprinting.

**CO OF B.SC III SEMESTER**

 **ZOOLOGY**

**TITLE- CELL BIOLOGY & DEVELOPMENTAL BIOLOGY**

**Students would be able to--**

**CO1** Differentiate between between Prokaryotic and Eukaryotic cells and have knowledge of Nuclear and Extra nuclear organelles of cells.

**CO2** Gain knowledge of Cell division, Necrosis and Apoptosis.

**CO3**  Develop knowledge of Spermatogenesis,Oogenesis and developmental processes of embryo.

**CO4** Understand development of Frog and Chick.

**CO5**  Gain knowledge of Extra embryonic membranes, Regeneration and Stem cells.

**CO6** Develop practical knowledge of cell division and embryo stages through permanent slides.

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**CO OF B.SC IV SEMESTER**

 **ZOOLOGY**

**TITLE- GENETICS**

**STUDENTS WOULD BE ABLE TO-**

**CO1** Develop understanding of Types of Chromosomes, Heredity and Variation, Genes and Genetic code.

**CO2** Understand gene linkage, sex determination and sexlinked diseases like Haemophilia and Colour blindness.

**CO3** Understand cytoplasmic inheritance, gene expression

and Lac Operon model.

**CO4** Gain knowledge of Mutations, causes and related Mutagens.

**CO5** Understand gene therepy, DNA fingerprinting, Human chromosomes and chromosomal diseases.

**CO6** Develop practical understanding of instruments like PCR, Gel Electrophoresis,DNA fingerprinting and solve problems of genetics.

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**CO OF B.SC. V SEMESTER**

**ZOOLOGY**

**TITLE- ANIMAL PHYSIOLOGY AND BIOCHEMISTRY**

**Students would be able to -**

**CO1** Understand the physiology of mammals and various metabolic processes.

**CO2** Understand vital processes like Respiration, Excretion and Immune system.

**CO3** Develop understanding of neurons,Nerve impulse, Human brain and Neuromuscular co-ordination.

**ĆO4** Gain knowledge of Endocrine glands, their functions and effects of hypo and hyper secretion and physiology of reproduction.

**CO5** Understand Nervous system and Neuromuscular coordination.

**CO6** Develop practical knowledge of biochemical tests, Histology and Haematology.

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**CO OF B.SC. VI SEMESTER**

**ZOOLOGY**

**TITLE- ECOLOGY AND APPLIED ZOOLOGY**

**STUDENTS WOULD BE ABLE TO-**

**CO1** Gain knowledge of food chain, food web, biogeochemical cycle and concept of population.

**CO2** Understand habitat ecology, biodiversity and importance of natural resources and their conservation.

**CO3** Develop respect for nature and wildlife and understand relation between man and environment.

**CO4** Gain knowledge of Aquaculture, Pearl Industry, Carp culture, preservation and processing of fish.

**CO5** Understand Economic zoology, Sericulture, Apiculture and Lac culture, pest management and biological control of pests.

**CO6** Develop practical knowledge of pests and their management and evidence based decision making skills.

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