COURSE OUTCOMES OF B.SC. - ZOOLOGY •

Animal Diversity – Invertebrates

- Describe general taxonomic rules on animal classification
- Classify Protista up to phylum using examples fromparasitic adaptation
- Classify Phylum Porifera to Echinodermata withtaxonomic keys
- Describe Phylum Nematoda and give examples of pathogenic Nematodes

Animal Diversity – Vertebrates

- Imparts conceptual knowledge of vertebrates, their adaptations and associations in relation to their environment
- Classify phylum Protochordates to Mammalia
- Complex Vertebrate interactions

Physiology and Animal Behavior:

- Seeks to understand the mechanisms that work to keep the human body alive and functioning
- Physiological and biochemical understanding through scientific enquiry into the nature of mechanical, physical, and biochemical functions of humans, their organs, and the cells of which they are composed
- Interactions and interdependence of physiological and biochemical processes

Cell Biology, Genetics

- Structural and functional aspects of basic unit of life i.e cell concepts
- Mendelian and non mendielian inheritance
- Concept behind genetic disorder, gene mutations- various causes associated with inborn errors of metabolism
- Understand Animal behaviour and response of animals to different instincts

Molecular Biology and Developmental Biology

- Knowledge about genetics, developmental biology andorganogenesis
- Application of DNA technology and molecular biology for research
- Gains knowledge about gametogenesis, cleavage mechanisms, gastrulation and role of hormones in metamorphosis and regeneration
- Provides students insight into maintaining healthy relationships with their opposite gender and allows them to make right choice about their life partner thus preventing congenital/ consanguial diseases.

Immunology:

- Imparts in depth knowledge of tissues, cells and molecules involved in host defensemechanisms
- Understanding of types of immunity
- Interactions of antigens, antibodies, complements and other immune components
- Understanding of immune mechanisms in disease control, vaccination, process of immune interactions

Animal biotechnology:

- Imparts the Knowledge to culture animal cells inartificial media.
- Knowledge of animal cells in culture, growth of celllines
- Use in recombinant DNA technology, genetic manipulations and in a variety of industrial processes.

Ecology, Zoogeography and Evolution;

- Distribution of fauna in different realms interaction
- Interaction of biota abiota
- Various kinds of Animal adaptations
- Imparts knowledge regarding the various theories of evolution, evolutionary process such as variation, speciation, natural selection, origin of primates and man
- Understanding of origin and salient features of Ostracoderms to Actinopterygii, adaptive radiation of Amphibians, Reptiles, birds and Mammals
- Gains knowledge of functional anatomy of vertebrates from fishes to mammals
- Understanding of evolutionary significance of internal fertilization, neoteny and paedogenesis
- Identifies the significance of amniotic egg its structure and evolutionary significance of skeletal system

Biodiversity and Conservation

- Biodiversity and conservation explore natural landscapes, species and ecosystems and acquires theories and practical methods in preserving environments and organisms.
- Biodiversity refers not only to endangered species but also to every organism, including microbes and fungi.
- Biodiversity and Conservation increase awareness and understanding of how human life depends on preserving animal species and natural ecosystems.