### **DEPARTMENT OF ZOOLOGY**

# COURSE OUTCOMES OF B.SC(CBZ) 2022-23

# **GOVERNMENT DEGREE COLLEGE, NARASANNAPETA**

# **SEMESTER I**

Paper- I: Animal Diversity – Biology of Non chordates

By the completion of the course the graduate should able to

**CO1**: Describe general taxonomicrules on animal classification

**CO2**: Classify Protozoa to Coelenterata with taxonomic keys

CO3: Classify Phylum Platy helminthes to Annelida phylum using examples from

parasitic adaption and vermin composting.

CO4: Describe Phylum Arthopoda to Mollusca using examples and impotance of

insects and Molluscans.

CO5 : Describe Echinodermata to Hemi chordate with suitable examples and

larval stages in relation to the phylogeny.

# **SEMESTER II**

Paper -II : Animal Diversity – Biolgy of Chordates

By the completion of the course the graduate should able to

**CO1**: Describe general taxonomic rules on animal classification of chordates

**CO2**: Classify Protochordata to Mammals with taxonomic keys

**CO3**: Understand Mammals with specific structural adaptations

**CO4**: Under stand the significance of dentition and evolutionary significance

CO5: Understand the origan and evolutionary relationship of different Phyla from

Prochordata to mammalian.

# **SEMESTER III**

Paper -III: CELL BIOLOGY, GENETICS, MOLECULAR BIOLOGY AND EVOLUTION

By the completion of the course the graduate should able to

CO1: To understand the basic unit of the living organisms and differentiate the organisms by their cell structure

CO2: Describe fine structure and function of plasma membrane and different cell organelles of eukaryotic cell

CO3: To understand the history of origin of branch of genetics, gain knowledge to heredity, interaction of genes, various types of inheritance patterns existing in animals

CO4 : Acquiring in depth knowledge on various of aspects of genetics involved in sex determination, human karyotyping and mutations of chromosomes resulting in various disorders.

CO5: Understand the central dogma of molecular biology and flow of genetic information from DNA to proteins

CO6: Understand the principles and forces of evolution of life on earth, the process of evolution of new species and apply the same to develop new and advanced varities of animals for the benefit of the society.

### **SEMESTER IV**

Paper- IV : ANIMAL PHYSIOLOGY, CELLULAR METABOLISM AND EMBRYOLOGY By the completion of the course the graduate should able to

CO1: Understand the function of important animal physiological systems including digestion, cardio-respiratory and renal system

CO2: Understand the muscular system and the neuro-endocrine regulation of animal growth, development and metabolism with a special knowledge of hormonal control of human reproduction.

CO3: Describe the structure, classification and chemistry of the biomolecules and enzymes responsible for sustenance of life in living organisms.

CO4: Develop broad understanding the basic metabolic activities pertaing to the catabolism and anabolism of various biomolecules.

CO5: Describe the key events in early embryonic development starting from the formation of gametes upto gastrulation and formation of primery germ layers.

# Paper-V: IMMUNOLOGY AND ANIMAL BIOTECHNOLGY By the completion of the course the graduate should able to

CO1 :To get knowledge of the organs of the immune system, types of immunity, cells and organs of immunity.

CO2: To describe the immunological response as to how it is triggered (antigen) and regulated (antibodies)

CO3: Understand the application of Biotechnology in the fields if industry and agriculture including animal cell/tissue culture, stem cell technology and genetic engineering.

CO4: Get familiar with the tools and techniques of animal biotechnology.

**SEMESTER V** 

**LONG TERM INTERNSHIP** 

## **SEMESTER VI**

Paper Title: Sustainable Aqua culture Management (6A)

By the completion of the course the graduate should able to

CO1: To improve scientific, technical and vocational skills required in the area of employment

**CO2**: Fisheries industry & Aquaculture management

CO3: Improve practical skills such as fish surveying. Fish husbandry

**CO4**: Identification and treatment of diseases and prevention methods

Paper Title: Post Harvest Technology Of Fish & Fisharies (7A)

**CO1**: Learn about Handling and principles of fish preservation

CO2: The gain knowledge about processing of fish food

**CO3**: Understand the importance of sanitation and quality control

CO4: To raise knowledge quality assurance and management and certification