P.R.GOVERNMENT COLLEGE (A), KAKINADA DEPARTMENT OF ZOOLOGY

Course outcomes for Zoology course

I Semister - Animal diversity I

- **CO1.** Familiar with the non-chordate world that surrounds us.
- CO2. Able to appreciate the process of evolution (unicellular cells to complex, multicellular organisms)
- **CO3.** Able to identify the invertebrates and classify them up to the class level with the basis of systematic
- CO4. Understand the basis of life processes in the non-chordates and recognize the economically important invertebrate fauna.

II Semister - Animal diversity II

- **CO1.** Describe the diversity in form, structure and habits of vertebrates
- **CO2.** Explain general characteristics and classification of different classes of vertebrates
- **CO3.** Inculcate in the student knowledge about morphology and physiology of typical examples a fascination for nature and learn the bionomics of vertebrates.
- **CO4.** Learn the evolution, hierarchy and classification of different classes of chordates

III Semister - Cytology, Genetics and Evolution

- **CO1.** Develop deeper understanding of what life is and how it functions at cellular level.
- **CO2.** Describe cellular membrane structure and function, fine structure and function of cell organelles and composition of prokaryotic and eukaryotic cells
- CO3. Distinguish Classical Genetics and Molecular Genetics. Mendel Laws, Sex Differentiation
- **CO4.** Understood the theories of evolution and highlighted the role of evidences in support of evolution and origin of life

Semister IV - Embryology, Physiology and Ecology **ZO 4208**

- **CO1.** Familiar with various stages involved in the developing chick. Familiar with types of placenta.
- **CO2.** Familiarise with the principle of developmental biology
- **CO3.** Students gain fundamental knowledge of animal physiology, the detailed concepts of digestion respiration excretion the functioning of nerves and muscles

ZO 1208

ZO 3208

ZO 2208

CO4. Understanding on the basic theories and principles of ecology. Learn current environmental issues based on ecological principles.

Semister V - Animal Biotechnology

- **CO.1** Understand the applications of Biotechnology.Familiar with the tools and techniques of Genetics and Biotechnology
- **CO2.** Understood the recombinant technology, gene integration into the vector and with host genome and creation of transgenic animals.
- **CO3.** Understood the principle and applications of biotechnology techniques DNA finger printing, plotting technique micro array.
- CO4. Described the applications stem cells and gene therapy and biotechnology devices

Semister V - Animal Husbandry

- CO1. Familiar with introduction to poultry farming, Management of chicks
- CO2. Understand the principles of feeding, Nutrient requirements and Poultry diseases
- CO3. Gains knowledge in methods of hatching, brooding and sexing of chicks
- **CO4.** Be able to distinguish between breeds of cattle, Classification. Gains knowledge in selection of site for diary farm, weaning of calf

Semister VI - Cellular Metabolism and Molecular. Biology ZO 6208A

- CO1. Understand the classification of carbohydrates, protiens and lipids
- **CO2.** Comprehends the enzyme action, Enxyme kinetics, regulation, various physiological Cycles like Kreb's, Gluconeogenesis, Electron transport
- CO3. Gains Knowledge of Lipid, protein metabolisms, Transport at cellular level
- **CO4.** Able to understand DNA Structure and function, fine structure of gene, Gene expression.

Semister VI - Principles of Aquaculture

- **CO1.** Described the fisheries and fishery industries, Understood the various types and Methods of aquaculture practices.
- CO2. Understood the physiology and reproductive mechanisms of important fishes.
- CO3. Understood the modern techniques and methods of fishery industries.
- **CO4.** Attained knowledge about important cultivable fin fishes, shell fishes and importance of value added fishery products

Semister VI - Aquaculture Management

CO1. Understands the Breeding techniques, Induced breeding, Hatchery management in

ZO 6208B

ZO 6208C

ZO 5208A

ZO 5208B

fishes and Shrimps

- **CO2.** Develops Skill in testing the water quality suitable for fish culture, different aeration methods and emergency aeration
- CO3. Attains knowledge of fish feeds, live feeds, feed formulation, feed additives
- **CO4.** Be familiar with the various diseases and their control in fishes, various training Institutes of India and role of genetics in aquaculture.

Semister VI - Post Harvest Technology

ZO 6208D

- CO1. Learns to handle fish during transport. Understands the post-mortem changes
- CO2. Understands the principle behind the preservation of fishes like icing, salting, freezing
- **CO3**. Attains knowledge on processing and preservation and fish byproducts and quality control during marketing
- **CO4.** Be faimiliar with various hygiene precautions during processing of aquatic products. Understand the importance of seaweed culture