

**A D B first Grade College, Harapanahalli**

**Course Outcomes (CO's)**

**DEPARTMENT OF ZOOLOGY**

**B.Sc. I Semester**

**Paper: 1. Cytology, Genetics & Infectious diseases**

At the end of the course the student should be able to know

- The structure and functions of cell organelles.
- The chromatin structure and its location.
- The basic principle of life, how a cell divides leading to the growth of an organism and also reproduces to form a new organism.
- How a cell communicates with its neighbouring cells.
- The principles of inheritance, Mendel's laws and the deviations.
- How environment plays an important role by interacting with genetic factors.

**B.Sc. II Semester**

**Paper: 2. Biochemistry and Physiology**

At the end of the course the student should be able to know

- Basic structure of bio molecules through model making.
- Develop the skills to identify different types of blood cells.
- Enhance basic laboratory skills like keen observation, analysis and discussion.
- Learn the functional attributes of bio molecules in animal body.
- Know uniqueness of enzymes in animal body and their importance through enzyme kinetics.

**B.Sc. III Semester**

**Paper: 3. Economic zoology**

At the end of the course the student should be able to know

- Understands the concept of fisheries, dairy, poultry, sericulture and aquaculture. Students will get an insight into Bee keeping tools and equipment and learn to manage Bee hives for honey production, harvest and marketing.
- Understanding about identification of food fishes of Karnataka and life cycle of Bomboxy mori.
- The technical knowledge about dairy management, types of breeds, nutritive value of milk, and different cattle diseases.
- Sericulture, poultry and dairy are agro based industries in India that enables students to get self-employment.

**B.Sc. IV Semester**

**Paper: 4. Biochemistry and Physiology**

At the end of the course the student should be able to know

- Conducting experiments, satisfactory analysis of data and interpretations of results.

- The distinguishing details about glands and vital organs of human body.
- Understanding the interactions and interdependence of physiological and biochemical process.
- The concepts of endocrine system and homeostasis there by gaining fundamental knowledge of animal physiology and biochemistry.
- The functional attributes of bio chemicals in animal body.

### **B.Sc. V Semester**

#### **Paper: 5.1 Molecular biology, Immunology and wildlife**

At the end of the course the student should be able to know

- The basic knowledge of structure and function of DNA and RNA, and the synthesis of proteins.
- About immunology and its aspects.
- The basic knowledge of antigen and antibodies.
- The knowledge about Biodiversity, Animal relationship and hotspots in animals.
- About the Endangered and Extinct species.

### **B.Sc. V Semester**

#### **Paper: 5.2A Economic Zoology**

At the end of the course the student should be able to know

- The education on bee improvement and to increase the public awareness about health aspects of honey and it's by products.
- Imparts the knowledge about silk worm rearing, mulberry cultivation, pest and diseases associated with silk worm.
- About the poultry breeds, nutritive value of egg, poultry farming, and diseases associated with poultry fowls.
- The knowledge of economic zoology for the purpose of self employment and agro based industry.

### **B.Sc. VI Semester**

#### **Paper: 6.1 Cell biology, cancer biology and developmental biology**

At the end of the course the student should be able to know

- About the skill of squash preparation method to study mitosis and meiosis and also learn the different stages.
- The knowledge about tumour cells and impacts about the carcinogenic agents.
- About basic knowledge of chromosomal syndrome and its karyotypes.
- About the development of egg and chick.
- About developmental aspects of human beings.

### **B.Sc. VI Semester**

#### **Paper: 6.2 Genetics, Palaeontology and evolution.**

At the end of the course the student should be able to know

- About the mendelian laws of inheritance.

- The concepts of interaction of gens linkage and crossing over.
- The origin of life and evidence of organic evolution.
- About the evolutionary history of horse and man.
- About fossils and how the fossils are preserved and dating.