

॥ संहती कार्य साधिका, शिल्म परम भूषणं ॥

**Shetkari Shikshan Prasarak Mandal's  
KRISHNA MAHAVIDYALYA RETHARE BK.**

**Department of Zoology**

**PROGRAM SPECIFIC OUTCOMES**

**AND**

**COURSE OUTCOMES**

**FOR OUTCOME-BASED EDUCATION**

Shetkari Shikshan Prasarak Mandal's

**KRISHNA MAHAVIDYALAYA, RETHARE BK**

**DEPARTMENT OF ZOOLOGY**

**PROGRAMME OUTCOMES**

Academic Year 2018-2019

After completion of the B. Sc programme, the students will develop ability:

- A. The B.Sc Programme develops an insight of scientific inquisitiveness among students.
- B. It increases **scientific** temperament and attitude among science graduates.
- C. It creates a systematic method of study ie. Observation, Experiment, and Conclusion which is a basic principle of scientific research.
- D. The qualities of a science – observation, precision, analytical mind, logical thinking, clarity of thought and expression, systematic approach, qualitative and quantitative decision making are enlarged.
- E. The program also empowers the graduates to appear for various competitive examinations or choose the post graduate programme of their choice.
- F. It trains the learners to extract information, formulate a scientific method of study and solve problems in a systematic and logical manner
- G. This programme enables the learners to perform jobs in diverse fields such as agriculture, industries, engineering, survey, education, banking, development-planning, business, public service, self-business etc., efficiently.
- H. The programme also helps the students to perform their carrier in the field of basic and applied research.
- I. Understood the basic concepts, fundamental principles, and scientific theories related to various scientific phenomena and their relevancies in the to-day life.

After completion of the programme, the students will develop ability:

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**PROGRAMME SPECIFIC OUTCOMES**

Academic Year 2018-2019

After completion of the programme, the students will develop ability:

- A. To understand the core knowledge of Zoology and the basic concepts which help them in understanding the basics of Zoology.
- B. It identify their area of interest and further specialization in the subject and also develops skills and competence to conduct scientific study of Flora and Fauna.
- C. Students will demonstrate broad understanding of major current and past theories research findings and methodologies and techniques in their area of concentration both orally and writing.
- D. To understand the nature and basic Concepts of Cell Biology and the basic Concepts of Chordates and Non-Chordates along with the Concepts of Goaterly and Lac Culture.
- E. To understand the various Applications of Biotechnology, the Lamarkism, Neo-Lamarkism and Darwinism and the terms ELISA technique, DNA finger printing and the process of evolution.
- F. It helps to retrieve, evaluate, and interpret professional scientific literature and use this information to develop theoretical framework, testable hypothesis and prediction for their own research project.
- G. It provides advanced knowledge and skills for technical work in research and formulation of theories, concept, principals along with their knowledge and skills in carrying out independent work.

**KRISHNA MAHAVIDYALAYA, RETHARE BK**

**DEPARTMENT OF ZOOLOGY**

**ZOOLOGY COURSE OUTCOMES**

**Academic Year 2018-2019**

**B.Sc. (Zoology)**

Annexure-C

**B.Sc. I.**

**Paper I: Animal Diversity I**

By the end of this Course students should be able to know about:

- CO1. Understanding the arrangement of organism or groups of organisms in distinct categories in accordance with particular & well-established plan.
- CO 2. Explanation of unity in diversity of organism.
- CO 3. Studying specific & scientific names to organism.
- CO4. Collecting information about useful and harmful animals, helps in understanding the nature of habitat.

**Paper II: Animal Physiology**

By the end of this Course students should be able to know about:

- CO 1. Understanding the structure and function of cell & cell organelles.
- CO2. To study animal tissue to improve knowledge about genetic information. it study how organism evolve from a single cell division, get knowledge about unicellular & multi-cellular organisms.
- CO 3. Understanding normal function of cell, organ or tissue.

**Paper IV: Genetics**

By the end of this Course students should be able to know about:

- CO 1. Study of structure function, molecular organization, growth, reproduction and genetics of cell.
- CO 2. Study of Mendelian and Post Mendelian genetics.

CO 3. Study of Linkage and Crossing Over.

CO 4. Study of Mutations.

CO 5. Understanding evolutionary history of certain animals, study their sericulture which is one of the longest agro industries & silk is used in the manufacture of woven materials.

## **B.Sc. II**

### **Paper V: Animal Diversity II**

By the end of this Course students should be able to know about:

CO 1. Understanding the arrangement of organism or groups of organism in distinct categories in accordance with particular & well established plan.

CO 2. Understanding General features and Classification up to orders; Venomous and non-venomous snakes, Biting mechanism in snakes.

CO 3. Study General features and Classification up to orders; Osmoregulation in Fishes.

### **Paper VI: Biological Chemistry**

By the end of this Course students should be able to know about:

CO 1. Study of chemistry within living organisms.

CO 2. Perceiving the chemical components & chemical structure in organisms.

CO 3. Study how body functioning with the help of chemical molecules elements.

### **Paper VII: Reproductive Biology**

By the end of this Course students should be able to know about:

CO 1. Study outline and histology of female and male reproductive system

CO 2. Functional anatomy of female and male reproduction.

CO 3. Understand infertility in male and female: causes, diagnosis and management; Assisted

CO 4. Reproductive Technology: sex selection, sperm banks, frozen embryos, in vitro fertilization, ET, EFT.

### **Paper VIII: APPLIED ZOOLOGY**

By the end of this Course students should be able to know about:

CO 1. Improving proper knowledge about Transmission, Prevention and control of diseases



Tuberculosis, typhoid.

CO 2. Understanding Insects of Economic Importance.

CO 3. Study the principles of poultry breeding, Management of breeding stock and broilers, Processing and preservation of eggs.

### **B.Sc. III**

#### **Zoology Paper- IX FUNCTIONAL ANATOMY OF NON-CHORDATES**

By the end of this Course students should be able to know about:

CO 1. Study of protozoa, porifera, coelenterate, Mollusca.

CO 2. Study of Leech and Sea star as type study.

#### **Zoology Paper- X BIOSTATISTICS, BIOINFORMATICS AND MEDICAL ZOOLOGY**

By the end of this Course students should be able to know about:

CO 1. Study of biostatistics.

CO 2. Study of bioinformatics.

CO 3. Study of medical zoology.

#### **Zoology Paper- XI MOLECULAR BIOLOGY, BIOTECHNOLOGY AND BIOTECHNIQUES**

By the end of this Course students should be able to know about:

CO 1. Study of molecular biology.

CO 2. Study of Biotechnology.

CO 3. Study of Biotechniques.

#### **Zoology Paper- XII ENDOCRINOLOGY, ENVIRONMENTAL BIOLOGY AND TOXICOLOGY**

By the end of this Course students should be able to know about:

CO 1. Study of Endocrinology.

CO 2. Study of Environmental biology.

CO 3. Study of Toxicology.

#### **Zoology Paper- XIII COMPARATIVE ANATOMY OF VERTABRATES**

By the end of this Course students should be able to know about:

CO 1. Comparative study of Integumentary System, Skeletal System

CO 2. Comparative study of Digestive System, Respiratory system

CO 3. Comparative study of Circulatory system, Kidney

CO 4. Comparative study of Nervous system, Sense organs

#### **Zoology Paper- XIV DEVELOPMENTAL BIOLOGY**

By the end of this Course students should be able to know about:

CO 1. Study of Gametogenesis

CO 2. Study of Early Development of Frog

CO 3. Study of Chick Embryology

CO 4. Study of Late Embryonic Development

#### **Zoology Paper- XV PHYSIOLOGY**

By the end of this Course students should be able to know about:

CO 1. Study of Nutrition, balanced diet.

CO 2. Study of Digestive system, respiratory system.

CO 3 Study of circulatory, nervous system.

#### **Zoology Paper- XVI APPLIED ZOOLOGY**

By the end of this Course students should be able to know about:

CO 1. Study of Fisheries.

CO 2. Study of Apiculture, poultry farming.

CO 3. Study of Prawn culture, pest management, Dairy farming.

Dr   
**Head**  
**Department of Zoology**  
K. M. Rethare (Bk.)



  
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