॥ संहती कार्य साधिका, शिलंम परम भूषणंम ॥

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 2017-2018

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, developmentplanning, 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.

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

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PROGRAMME SPECIFIC OUTCOMES

Academic Year 2017-2018

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 or ally 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 Goatery 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.

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ZOOLOGY COURSE OUTCOMES

Academic Year 2017-2018

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.

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Head

Department of Zoology

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