

COURSE OFFERED

B.Sc. Zoology- Model I

PROGRAMME OUTCOMES

The student will be able to:

- Acquire the knowledge with facts and figures related to Zoology
- Understand the basic concepts, fundamental principles, and the scientific theories related to various scientific phenomena and their relevancies in the day-to-day life.
- Acquire the skills in handling scientific instruments, planning and performing in laboratory experiments
- Analyze the given scientific data critically and systematically and the ability to draw the objective conclusions.
- Think creatively (divergently and convergent) to propose novel ideas in explaining facts and figures or providing new solution to the problems.
- Realize how developments in any science subject helps in the development of other science subjects and vice-versa and how interdisciplinary approach helps in providing better solutions and new ideas for the sustainable developments.
- Develop scientific outlook not only with respect to science subjects but also in all aspects related to life.
- Imbibe ethical, moral and social values in personal and social life leading to highly cultured and civilized personality.
- Develop various communication skills such as reading, listening, speaking, etc., which we will help in expressing ideas and views clearly and effectively.
- Realize that pursuit of knowledge is a lifelong activity and in combination with untiring efforts and positive attitude and other necessary qualities leads towards a successful life.
- Develop flair by participating in various social and cultural activities voluntarily, in order to spread knowledge, creating awareness about the social evils, blind faith, etc.
- Effectively use the basic IT skills for effective presentation and communication of ideas.

PROGRAMME SPECIFIC OUTCOMES

- 1.Acquire basic knowledge of various disciplines of Zoology and General Biology meant both for a graduate terminal course and for higher studies.
2. Inculcate interest in nature and love of nature.
3. Understand the rich diversity of organisms and their ecological and evolutionary significance
4. Imbibe basic skills in the observation and study of nature, biological techniques,

experimental skills and scientific investigation

5. Create awareness on the internal harmony of different body systems and the need for maintaining good health through appropriate lifestyle.

6. Acquire basic knowledge and skills in certain applied branches for self employment

7. Impart awareness of the conservation of the biosphere.

COURSE OUTCOMES

GENERAL PERSPECTIVES IN SCIENCE & PROTISTAN DIVERSITY

- To create an awareness on the basic philosophy of science, concepts and scope
- To understand different levels of biological diversity through the systematic classification

ANIMAL DIVERSITY - NON CHORDATA

- To understand the evolutionary significance of invertebrate fauna

ANIMAL DIVERSITY –CHORDATA

- To acquire in depth knowledge on the diversity of chordates and their systematic position

RESEARCH METHODOLOGY, BIOPHYSICS AND BIostatISTICS

- To develop skill in research communication and scientific documentation.
- To equip the students with the basic techniques of animal rearing collection and preservation
- To help the student to apply statistical methods in biological studies.

ENVIRONMENTAL BIOLOGY AND HUMAN RIGHTS

- To create a consciousness regarding Biodiversity, environmental issues & conservation strategies
- To develop the real sense of Human rights – its concepts & manifestations
- To teach the basic concepts of toxicology, their impact on human health and remedial measures

CELL BIOLOGY AND GENETICS

- To understand the structure and function of the cell and organelles as the fundamentals for understanding the functioning of all living organisms.
- To emphasize the central role of genes and their inheritance in the life of all organisms

EVOLUTION, ETHOLOGY & ZOOGEOGRAPHY

- To study the distribution of animals on earth, its pattern, evolution and causative factors
- To impart basic knowledge on animal behavioural patterns and their role

HUMAN PHYSIOLOGY, BIOCHEMISTRY, AND ENDOCRINOLOGY

- Defining and explaining the basic principles of biochemistry useful for biological studies for illustrating different kinds of food, their structure, function and metabolism.
- Explaining various aspects of physiological activities of animals and their hormonal control with special reference to humans
- This also will provide a basic understanding of the experimental methods and designs that can be used for further study and research

DEVELOPMENTAL BIOLOGY

- To identify the various developmental stages and the possible defects in growth

- To provide the students with the periodic class discussions of current events in science which will benefit them in their future studies in the biological/physiological sciences and health-related fields

MICROBIOLOGY AND IMMUNOLOGY

- To explain the mechanism of immunity and the role of hormones
- To describe microbial types, contamination sites, sterilization techniques and the ecological significance of microbes

BIOTECHNOLOGY, BIOINFORMATICS AND MOLECULAR BIOLOGY

- To provide an understanding about the tools and techniques in biotechnology, its fields of application and the potential hazards of biotechnological inventions
- Provide insights on gene expression and its regulation

OCCUPATIONAL ZOOLOGY

- To equip the students with self employment capabilities.
- To provide scientific knowledge of profitable farming.

PUBLIC HEALTH AND NUTRITION (ELECTIVE/ OPEN COURSE)

- To inculcate a general awareness among the students regarding the real sense of health.
- To understand the role of balanced diet in maintaining health.
- To motivate them to practice yoga and meditation in day-to-day life.