

Programme Outcomes (POs) for B.Sc. Zoology (4-Year Undergraduate Program)

Upon successful completion of the B.Sc. Zoology program, students will be able to:

PO1: Disciplinary Knowledge

Demonstrate a broad and fundamental understanding of the major concepts, principles, and theoretical frameworks in Zoology, including animal diversity (both non-chordates and chordates), comparative anatomy, physiology, genetics, evolution, cell biology, and ecology.

PO2: Practical and Analytical Skills

Develop strong laboratory skills and proficiency in biological techniques through hands-on experiments across physiology, microscopy, molecular biology, and ecological analysis. Analyze and interpret biological data using quantitative and qualitative approaches.

PO3: Scientific Communication and Collaboration

Effectively communicate biological concepts, experimental findings, and analytical insights in oral and written formats. Engage in collaborative work through group projects, discussions, and practical exercises, enhancing teamwork and interpersonal skills.

PO4: Evolutionary and Ecological Awareness

Understand and appreciate the evolutionary relationships among organisms, mechanisms of adaptation, and the interdependence of organisms and their environment. Recognize the importance of biodiversity, ecological balance, and conservation strategies.

PO5: Research Aptitude and Methodological Competence

Gain an introductory experience of scientific research, including designing and conducting investigations, using appropriate tools and methods, and adhering to ethical scientific practices. Develop competence in hypothesis testing, fieldwork, and documentation.

PO6: Problem Solving and Critical Thinking

Apply critical thinking to understand structure-function relationships in biological systems. Solve complex biological problems using integrative approaches that span molecular, cellular, organismal, and ecological levels.

PO7: Technological Literacy

Use modern biological tools, software, and instrumentation in areas like biochemistry, molecular biology, microscopy, and bioinformatics to enhance understanding of living systems.

PO8: Ethical and Social Responsibility

Recognize ethical issues in animal handling, biodiversity use, laboratory practices, and research. Show sensitivity toward animal welfare, environmental sustainability, and societal applications of biological knowledge.

PO9: Lifelong Learning and Career Preparedness

Be prepared for higher studies or careers in teaching, research, environmental consultancy, laboratory work, or public service. Cultivate a mindset for lifelong learning in rapidly advancing areas of zoological sciences.