



Department of Zoology



Programme Outcomes and Programme Specific Outcomes

Programme Outcome (PO)	Description (as per Generic Learning Outcomes)	Relevance to Zoology Syllabus	Score
1. Complex Problem Solving	Apply knowledge to analyze biological systems, diagnose issues in ecosystems, and propose scientific solutions.	Linked to courses like <i>Environmental Biology, Parasitology, Evolution, and Toxicology</i> .	3 (High)
2. Critical Thinking	Evaluate evidence, synthesize information, and make reasoned biological inferences.	Used in <i>Genetics, Biochemistry, Research Methodology, and Environmental Ethics</i> .	3 (High)
3. Research-Related Skills	Formulate hypotheses, collect field/lab data, and interpret findings.	Strongly evident in <i>Skills for Zoologists, Research Methodology, Biostatistics & Data Analytics</i> .	3 (High)
4. Analytical Reasoning	Analyze data patterns, interpret biological results, and assess ecological implications.	Present in <i>Biostatistics, Molecular Biology, Human Physiology, Ecology</i> .	3 (High)
5. Communication Skills	Communicate scientific ideas effectively in written and oral formats.	Achieved through <i>presentations, field reports, and scientific writing components</i> .	2 (Medium)
6. Environmental Awareness & Action	Recognize and act upon environmental and conservation issues.	Core in <i>Environmental Biology, Environmental Ethics, Wildlife & Ecotourism, EIA</i> .	3 (High)
7. Digital & Technological Skills	Use ICT, data software, and analytical tools in biological research.	Practiced in <i>Biostatistics & Data Analytics, Bioinstrumentation, Molecular Biology</i> .	3 (High)
8. Creativity & Innovation	Design experiments, develop solutions for conservation, and innovate in applied zoology.	Encouraged in <i>Bio-entrepreneurship, Genetic Engineering, Vermitechnology</i> .	2 (Medium)

9. Value Inculcation & Ethical Awareness	Demonstrate ethical responsibility towards animals, humans, and the environment.	Embedded in <i>Environmental Ethics, Animal Behaviour, Conservation Biology</i> .	3 (High)
10. Community Engagement & Service	Apply zoological knowledge in societal and environmental well-being.	Achieved through <i>Public Health, Hygiene, Wildlife Studies, Extension Activities</i> .	2 (Medium)

PSO No.	Programme Specific Outcome (PSO)	Linked Generic POs	Level of Attainability
PSO 1: Comprehend Animal Diversity and Evolutionary Relationships	Demonstrate understanding of the diversity, structure, function, and evolutionary relationships of organisms across all major animal phyla.	Complex Problem Solving, Analytical Reasoning	High (3)
PSO 2: Apply Biological and Laboratory Techniques	Acquire hands-on experience in microscopy, dissection, bioinstrumentation, and analytical methods to study animal form and function safely and effectively.	Research-Related Skills, Digital & Technological Skills, Autonomy	High (3)
PSO 3: Integrate Genetics, Cell Biology, and Biochemistry Concepts	Explain cellular and molecular processes, inheritance patterns, and biochemical pathways, and relate them to normal and disease conditions.	Critical Thinking, Analytical Reasoning	High (3)
PSO 4: Evaluate Environmental and Ecological Systems	Analyze ecosystem dynamics, biodiversity patterns, and environmental threats, and apply conservation strategies for sustainable living.	Environmental Awareness & Action, Complex Problem Solving	High (3)
PSO 5: Design and Conduct Scientific Investigations	Formulate hypotheses, design experiments, collect and interpret biological data using statistical and digital tools, and communicate findings ethically.	Research-Related Skills, Communication Skills, Digital Skills	High (3)
PSO 6: Demonstrate Ethical and Responsible Biological Practice	Exhibit ethical awareness and professional responsibility in the handling of animals, laboratory materials, and environmental resources.	Value Inculcation, Empathy, Accountability	Medium (2)
PSO 7: Promote Application of Zoology in Society and Industry	Apply zoological knowledge in fields such as public health, fisheries, vermitechnology, bio-entrepreneurship, and environmental consultancy.	Creativity & Innovation, Community Engagement	Medium (2)

PSO 8: Communicate and Collaborate Effectively	Present biological ideas clearly in written, oral, and digital formats, and work collaboratively in interdisciplinary or field-based teams.	Communication Skills, Collaboration Skills	Medium (2)
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PO \ PSO	PSO 1 Animal Diversity & Evolution	PSO 2 Lab & Field Techniques	PSO 3 Cell, Genetics & Biochem	PSO 4 Ecology & Environment	PSO 5 Research & Analysis	PSO 6 Ethics & Responsibility	PSO 7 Applied Zoology	PSO 8 Communication & Teamwork
PO 1 – Complex Problem Solving	3	2	2	3	3	2	3	2
PO 2 – Critical Thinking	2	2	3	3	3	2	2	2
PO 3 – Creativity & Innovation	2	2	2	2	3	2	3	3
PO 4 – Communication Skills	2	2	2	2	3	2	3	3
PO 5 – Analytical Reasoning	3	3	3	3	3	2	2	2
PO 6 – Research-Related Skills	2	3	3	2	3	2	2	2
PO 7 – Collaboration Skills	2	3	2	2	3	2	3	3
PO 8 – Digital &	2	3	3	2	3	1	2	2

Technological Skills								
PO 9 – Value Inculcation & Ethics	2	2	2	3	2	3	2	2
PO 10 – Environmental Awareness & Action	3	2	2	3	2	3	3	2

COs \ Outcomes	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8
CO1	2	3	2	2	2	2	1	1	2	2	3	1	2	2	2	2	2	2
CO2	3	3	2	2	3	2	2	2	2	3	2	2	3	3	3	2	3	2
CO3	3	3	3	3	2	2	2	3	2	2	2	3	2	2	2	2	3	3
CO4	2	3	2	2	3	3	2	2	3	3	3	2	2	3	3	3	2	2