

BISHOP HEBER COLLEGE (AUTONOMOUS) TIRUCHIRAPPALLI — 620017 TAMILNADU, INDIA

B. Sc. Zoology

Vision

Envisage quality higher education and research in the field of animal sciences with global perspectives by promoting discovery and learning contemporary fields in Zoology inculcating social values for the holistic development and to conserve nature thus contributing for nation building

Mission

- Bestow quality education emphasizing the cognitive learning and concern towards the animal kingdom.
- Enrich field training skills, biodiversity conservation and entrepreneurship in the applied zoological sciences
- Enhance highest level of academic accomplishment with interdisciplinary approach through research, industrial collaboration and amalgamate with reputed national and international universities
- Foster globally competent individuals with interpersonal skills and environmental consciousness for the betterment of the world.

Programme Outcomes

- 1. Interpret the fundamental concepts, theoretical principles, internal structures, physiological, molecular, evolutionary processes and environmental conservation
- 2. Analyze the complex interactions among the various animals of different phyla, their distribution and their relationship with the environment
- 3. Relate the principles, mechanism of inheritance and epidemiology of disease-causing organisms in reference to human health
- 4. Categorize the distribution of faunal diversity based on taxonomical ranking in animal kingdom through field survey and animal census
- 5. Exhibit analytical skills from cellular to molecular level in thrust areas of zoology
- 6. Apply transferable skills in the field of economic zoology encompassing more employment opportunities and entrepreneurship
- 7. Perceive effective communication and social interaction through field visits and outreach programmes.
- 8. Exhibit professional ethics with environmental consciousness, bioethics and concern towards conservation of biodiversity.
- 9. PO9-Drawing together the theoretical concepts and analytical skills from cognitive and computational perspectives that underlie self-directed and lifelong learning.

Programme Specific Outcomes

- 1. Categorize the taxonomical principles, hierarchy and functional aspects of various phyla with evolutionary significance
- 2. Relate the biochemical processes, molecular and cellular level, development, physiology and reproduction, microbes, genetics, evolution and ecological impact on animal behaviour.
- 3. Exhibit entrepreneurial skills in establishing agro based industries like Vermicompost preparation, Silk production unit, Apiculture, Fish farming and Integrated Farming System in association with government organizations.
- 4. Perform experiments in the areas of Taxonomy, Physiology, Ecology, Cell and molecular biology, Genetics, Biochemistry, Developmental biology, Immunology, Microbiology, Biotechnology and Bioinformatics and develop innovative ideas keeping abreast with the recent developments.



BISHOP HEBER COLLEGE (AUTONOMOUS) TIRUCHIRAPPALLI — 620017 TAMILNADU, INDIA

M. Sc. Zoology

Vision

Envisage quality higher education and research in the field of animal sciences with global perspectives by promoting discovery and learning contemporary fields in Zoology inculcating social values for the holistic development and to conserve nature thus contributing for nation building.

Mission

- Bestow quality education emphasizing the cognitive learning and concern towards the animal kingdom.
- Promulgate biodiversity conservation, field training skills, and entrepreneurship in the applied zoological sciences
- Enhance highest level of academic accomplishment with interdisciplinary approach through research, industrial collaboration and amalgamate with reputed national and international universities
- Foster globally competent individuals with interpersonal skills and environmental consciousness for the betterment of the world.

Programme Outcomes

- 1. Comprehend and apply accurately and creatively the principles and applications from the core areas in Zoology and its allied field.
- 2. Develop a holistic approach on the phylogeny with the rich diversity of organisms and their adaptations in ecology and evolutionary significance
- 3. Exhibit academic excellence in research and intellect in the areas of advanced Biological Research and Biodiversity Conservation
- 4. Formulate an appropriate solution for complex research problem and publishing the new findings in innovative research
- 5. Demonstrate diversified professional proficiency gained through various laboratory technical training, field census, internships, industrial and research projects.
- 6. Exhibit transferable and entrepreneurial skills in collaboration with research institutes and undertake interdisciplinary research.
- 7. Build trust and blend complementary strengths through communicative competence, encourage healthy risk-taking, and promote wider sense of ownership.
- 8. Exhibit ethical and social values commit to professional ethics, liability and widen the empathy and love towards the animals
- 9. Develop methods towards protection of endangered species, pollution control, waste management and pave way for a sustainable environment.

Programme Specific Outcomes

- 1. Illustrate the comprehensive knowledge of origin, salient features and functional aspects in system grade of organizations from lower invertebrates to higher chordates
- Comprehend the functions of organisms at the level of gene, genome, cell, tissue, organ and development, reproduction and behaviour of different lifeforms and their interrelationships with the environment.
- 3. Analyze the biochemical, microbiological, Immunological processes and Bioinformatics databases to track evolution and predictions of biomolecules and to test the hypothesis by using statistical tools
- 4. Identify appropriate resources like animal handling techniques and model organisms required to carry out the projects and apply the technical skills to contribute new scientific discoveries and inventions.