## RANIGANJ GIRLS'COLLEGE BSC HONOURS IN ZOOLOGY &

## BSC PROGRAM IN ZOOLOGY PROGRAM OUTCOMES

**Disciplinary knowledge and skills:** Capable of demonstrating (i) comprehensive knowledge and understanding of major concepts, theoretical principles and experimental findings in Zoology and its different subfields (animal diversity, principles of ecology, comparative anatomy and developmental biology of vertebrates, physiology and biochemistry, genetics and evolutionary biology, animal biotechnology, applied Zoology, aquatic biology, immunology, reproductive biology, and insect, vectors and diseases), and other related fields of study, including broader interdisciplinary subfields such as chemistry, physics and mathematics; (ii) ability to use modern instrumentation for advanced genomic and proteomic technology.

**Skilled communicator:** Ability to impart complex technical knowledge relating to Zoology in a clear and concise manner in writing and oral skills.

Critical thinker and problem solver: Ability to have critical thinking and efficient problem solving skills in the basic areas of Zoology (animal diversity, principles of ecology, comparative anatomy and developmental biology of vertebrates, physiology and biochemistry, genetics and evolutionary biology, animal biotechnology, applied Zoology, aquatic biology, immunology, reproductive biology, insect, vectors and diseases etc.).

**Sense of inquiry:** Capability for asking relevant/appropriate questions relating to issues and problems in the field of Zoology, and planning, executing and reporting the results of an experiment or investigation.

**Team player/worker:** Capable of working effectively in diverse teams in both classroom, laboratory and in industry and field-based situations.

**Skilled project manager:** Capable of identifying/mobilizing appropriate resources required for a project, and manage a project to completion, while observing responsible and ethical scientific conduct; and safety and chemical hygiene regulations and practices.

**Digitally literate:** Capable of using computers for Bioinformatics and computation and appropriate software for analysis of genomics and proteomics data, and employing modern bioinformatics search tools to locate, retrieve, and evaluate location and biological annotation genes of different species.

Ethical awareness/reasoning: Capable of conducting their work with honesty and precision thus avoiding unethical behaviour such as fabrication, falsification or misrepresentation of data or committing plagiarism, and appreciating environmental and sustainability issues. Research ethics committee expects them to declare any type of conflict of interest that may affect the research. Any plan to withhold information from researchers should be properly explained with justification in the application for ethical approval.

**Lifelong learners:** Capable of self-paced and self-directed learning aimed at personal development and for improving knowledge/skill development and reskilling.

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