



Department of Genetic Engineering and Biotechnology
Faculty of Health and Life Sciences
B. Sc. (Hons.) in Genetic Engineering and Biotechnology
Final Examination Spring 2026

Course Code: 0512-1103

Level and Term: L-1, T-1
Time: 02 Hours

Section: 261-A

Course Title: Introduction to Animal Science

Course Teacher Initials: KMH
Total Marks: 40

1. (a) Discuss the prospects and applications of Animal Science. [CLO1, PLO2, C6]
(b) Explain the habitat, as well as the economic and biotechnological significance of *Macrobrachium rosenbergii* (giant freshwater prawn). [CLO1, PLO2, C2]
2. (a) Elaborate the external morphology and biotechnological significance of *Lamellidens* species (Phylum Mollusca). [CLO1, PLO2, C6]
(b) List the animals commonly used in laboratories for practical and research purposes, and briefly discuss their roles. What is the '3Rs' principle? [CLO4, PLO1, C4]
3. (a) Explain apiculture and sericulture farming including their technical, commercial and financial aspects. [CLO3, PLO2, C2]
(b) Analyze dairy and poultry farming, including their technical and financial aspects. [CLO1, PLO1, C4]
4. (a) Discuss Foot-and-Mouth Disease (FMD) and Mastitis in dairy animals. [CLO1, PLO2, C6]
(b) Explain Avian Influenza (Bird Flu), Newcastle disease (Ranikhet disease), and Fowl Pox in poultry. [CLO1, PLO2, C5]
5. (a) Illustrate the reproductive tract of a cow with a labelled diagram. [CLO3, PLO2, C2]
(b) Draw and label the reproductive system of a bull. [CLO3, PLO2, C3]