



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

Course Code: 0512-1103

Course Title: Introduction to Animal Sciences

Level and Term: L-1, T-1

Section 262 A

Course Teacher's Initial: KMH

Time: 02 Hours

Total Marks: 40

Answer the following questions:		Marks
1. (a)	Draw and label the diagram of a female reproductive tract of a cow and briefly explain its anatomical features. [CLO1, PLO2, C1]	5.0
(b)	Illustrate estrous cycle in farm animals. Present in tabular form the gestation period of major farm animals including the age at onset of puberty, age at first service, length of the estrous cycle, duration of estrus, and gestation period. [CLO1, PLO2, C2]	3.0
2. (a)	Classify the digestive systems of domesticated animals, providing suitable examples and stating the key characteristics of each type. State the major functions of the different compartments of the ruminant stomach. [CLO5, PLO2, C2]	3.0
(b)	Briefly discuss the habitat, distribution, economic importance and biotechnological significance of <i>Macrobrachium rosenbergii</i> (giant freshwater prawn). [CLO5, PLO2, C6]	5.0
3. (a)	List and discuss the types of animals commonly used in laboratories for practical and research purposes, and explain their major implications. [CLO1, PLO2, C4]	5.0
(b)	List the major protozoan and helminth diseases of dairy animals and select one representative disease from each category and discuss its causal agents, aetiology, pathogenesis, clinical symptoms, diagnosis, treatment & control measures. [CLO1, PLO2, C4]	3.0
4. (a)	Define apiculture and sericulture, and explain their technical and commercial aspects. [CLO5, PLO2, C1]	4.0
(b)	Discuss the major technical and commercial aspects of dairy and poultry farming. [CLO5, PLO2, C6]	4.0
5. (a)	List the major viral, bacterial, and fungal diseases of dairy animals. Select one representative disease from each category and discuss its causal agents, aetiology, pathogenesis, clinical symptoms, diagnosis, treatment & control measures. [CLO1, PLO2, C4]	4.0
(b)	List the major viral, bacterial, and fungal diseases of poultry and select one representative disease from each category and discuss its causal agents, aetiology, pathogenesis, clinical symptoms, diagnosis, treatment & control measures. [CLO1, PLO2, C4]	4.0