

KAMARAJ COLLEGE (Autonomous)

Accredited with A+ Grade by NAAC

(Affiliated to Manonmaniam Sundaranar University, Tirunelveli)

(3 Pages)

Reg. No:.....

Question Code: 26E00606

Course Code : 24UFZO11

UG Degree - End Semester Examinations, April 2026

First Semester

B.Sc., ZOOLOGY

Introduction to Zoology

(For those who joined in July 2024 onwards)

Time : 3Hours

Maximum : 75 Marks

PART - A (10 × 1 = 10 Marks)

Answer ALL Questions

Choose the correct answer :

- CO:1 1. Which of the following is a vertebrate?
K:1 (a) Prawn (b) Frog
(c) Snail (d) Hydra
- CO:1 2. Which of the following belongs to Phylum Mollusca?
K:1 (a) Earthworm (b) Cockroach
(c) Octopus (d) Starfish
- CO:2 3. Which organelle is mainly responsible for protein synthesis?
K:1 (a) Lysosome (b) Golgi body
(c) Ribosome (d) Mitochondria
- CO:2 4. Which structure is present in prokaryotic cells but absent in
K:1 eukaryotic cells?
(a) Mitochondria (b) Endoplasmic reticulum
(c) Nucleoid region (d) Golgi apparatus
- CO:3 5. Which of the following is a structural protein?
K:1 (a) Collagen (b) Insulin
(c) Hemoglobin (d) Glucose
- CO:3 6. Which vitamin is also called ascorbic acid?
K:1 (a) Vitamin A (b) Vitamin B
(c) Vitamin D (d) Vitamin C

- CO:4 7. Which layer of the atmosphere contains the ozone layer?
K:1 (a) Troposphere (b) Stratosphere
(c) Mesosphere (d) Thermosphere
- CO:4 8. What type of habitat is characterized by high salinity?
K:1 (a) Marine habitat (b) Terrestrial habitat
(c) Freshwater habitat (d) Desert habitat
- CO:5 9. Which silkworm species is commonly used in commercial sericulture?
K:1 (a) *Apis mellifera* (b) *Bombyx mori*
(c) *Laccifer lacca* (d) *Perionyx excavatus*
- CO:5 10. Which field involves the use of microorganisms for industrial production?
K:1 (a) Ecotourism (b) Poultry keeping
(c) Biotechnology (d) Aquarium keeping

PART - B (5 X 5 = 25 Marks)

Answer ALL Questions choosing either (a) or (b).

Answer should not exceed 250 words.

- CO:1 11. (a) Explain the principles and rules of binomial nomenclature.
K:2 **(OR)**
(b) Relate the different levels of taxonomic hierarchy with suitable examples from the animal kingdom.
- CO:2 12. (a) Illustrate the ultrastructure of a typical prokaryotic cell.
K:2 **(OR)**
(b) Outline the cell theory and discuss its major postulates.
- CO:3 13. (a) Summarize the importance of water as a universal solvent in living systems.
K:2 **(OR)**
(b) Classify carbohydrates with suitable examples.
- CO:4 14. (a) Discuss the therapeutic applications of cow urine and milk in Ayurvedha.
K:2 **(OR)**
(b) Explain the basic structure of the atmosphere and describe its major strata.

CO:5 15. (a) Explain the life cycle of silkworm and its importance in
K:2 sericulture.

(OR)

(b) Outline the importance of dairy farming in integrated farming systems.

PART - C (5 X 8 = 40 Marks)

Answer ALL Questions choosing either (a) or (b).

Answer should not exceed 500 words.

CO:1 16. (a) Organize the general characteristics of Phylum Chordata.

K:3

(OR)

(b) Discover the salient features of major invertebrate phyla with examples.

CO:2 17. (a) Analyze the structure of Watson and Crick model of DNA
K:4 and explain its biological significance.

(OR)

(b) Compare the differences between prokaryotic and eukaryotic cells.

CO:3 18. (a) Analyze the physiological importance of lipids in membrane
K:4 architecture.

(OR)

(b) Explain the classification of vitamins and its deficiency disorders.

CO:4 19. (a) Explain the structural and functional components of an
K:5 ecosystem.

(OR)

(b) Describe the role of animals in Ayurvedic Medicine.

CO:5 20. (a) Assess the importance of vermiculture in waste
K:5 management and sustainable agriculture.

(OR)

(b) Explain the contribution of Zoology-based entrepreneurial activities to self-employment and rural economy.