

December 2023

**B. Sc. (Life Science) Re-Appear - I SEMESTER
Zoology I Animal Diversity (BLS-102)**

Time: 3 Hours

Max. Marks:75

- Instructions:**
1. It is compulsory to answer all the questions (1.5 marks each) of Part -A in short.
 2. Answer any four questions from Part -B in detail.
 3. Different sub-parts of a question are to be attempted adjacent to each other.

PART -A

- Q1 (a) What is nematocyst and its function? (1.5)
 (b) Define diffuse type of nervous system. (1.5)
 (c) Comment on leucon type of canal system. (1.5)
 (d) Define vermicomposting. (1.5)
 (e) What is book lung? (1.5)
 (f) Distinguish between protonephridia and metanephridia. (1.5)
 (g) What is retrogressive metamorphosis? (1.5)
 (h) Define paedomorphosis. (1.5)
 (i) Distinguish between true horns and antlers. (1.5)
 (j) What are marsupials? (1.5)

PART -B

- Q2 (a) Describe the life cycle of *Obelia*. (8)
 (b) Explain the body structure of porifera. (7)
- Q3 (a) Elaborate the life cycle of *Plasmodium* along with diagram. (9)
 (b) Write a note on corals. (6)
- Q4 (a) Elaborate different types of metamorphosis found in insects. Also state the hormonal control on metamorphosis. (9)
 (b) Enlist the characters of Annelida class Hirudinea. (6)
- Q5 (a) Describe any three larval forms found in Echinodermata with diagram. (9)
 (b) Explain the phenomenon of torsion found in Gastropods. (6)
- Q6 (a) Describe the biting mechanism of snakes. (5)
 (b) Write a note on osmoregulation process found in fishes. (5)
 (c) Describe the characters that acts as flight adaptation in birds. (5)
- Q7 (a) Elaborate the characteristics of reptiles that distinguish them from amphibians. (5)
 (b) Explain the life cycle of *Fasciola hepatica* with appropriate diagrams. (10)