

**FIRST SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2023
(Regular/Improvement/Supplementary)**

ZOOLOGY

GZOL1B01T: ANIMAL DIVERSITY: NON-CHORDATA PART- I

Time: 2 Hours

Maximum Marks: 60

SECTION A: Answer the following questions. Each carries *two* marks.

(Ceiling 20 Marks)

1. Differentiate between phenetics and phylogenetics.
2. Explain the demerits of five kingdom classification.
3. Describe the nature of coelom in *Bilateria*.
4. Comment on the development and life cycle of Rotifers.
5. With aid of diagram explain enterocoely formation of coelom.
6. Differentiate between haplontic and diplontic life cycle.
7. Write down the silent features of Phylum Rhombozoa.
8. Write down the distinguishing features of class Calcispongiae.
9. Comment on comb ribs in ctenophora.
10. List out the peculiarities of digestive system in Dugesia.
11. Comment on nocturnal periodicity exhibited by filarial worm.
12. Describe the organization of Gastrotricha.

SECTION B: Answer the following questions. Each carries *five* marks.

(Ceiling 30 Marks)

13. What are the major criteria considered in the classification of animals?
14. Explain and differentiate zygotic meiosis and gametic meiosis.
15. Describe the salient features of phylum Dinoflagellata. Give an example.
16. Elucidate the importance of canal system in sponges.
17. Describe the structure and function of tentacles in Pleurobrachia.
18. Brief out the salient features of phylum Platyhelminthes.
19. Detail out the external morphology of *Ascarislumbricoides* with a note on its sexual dimorphism.

SECTION C: Answer any *one* question. Each carries *ten* marks.

20. What is the role of systematics in classification? Discuss the various approaches employed here.
21. Detail the characteristic features of Phylum Ctenophora. Describe any one example.

(1 x 10 = 10 Marks)