## 2022

## ZOOLOGY — HONOURS

Paper: CC-1

(Nonchordate - I)

Full Marks: 50

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

1. Answer any five questions from the following:

 $2 \times 5$ 

- (a) Distinguish between microtaxonomy and macrotaxonomy.
- (b) What are preconjugants and exconjugants?
- (c) Define metagenesis with an example.
- (d) What do you understand by biradial symmetry? Give an example.
- (e) Where do you find nectocalyx? State its function.
- (f) What are prosopyles and apopyles?
- (g) What is binomial nomenclature? Give an example.
- (h) Mention the causes of coral bleaching.
- 2. Write notes on any two of the following:

5×2

- (a) Role of symbiotic algae in coral reef formation
- (b) Types of spicules in Porifera
- (c) Excystment and metacystic development of Entamoeba
- (d) Parasitic adaptations of Fasciola hepatica.
- 3. Answer any three questions from the following:
  - (a) (i) Draw and describe Leuconoid canal system and show the course of water flow.
    - (ii) Draw and describe the structure of flagellum in Euglena sp.

(2+3)+(2+3)

- (b) (i) Explain the pre-erythrocytic schizogony of Plasmodium vivax.
  - (ii) What are Schuffner's dots?
  - (iii) Compare Calcarea and Demospongiae with examples.

4+2+4

- (c), (i) Describe the principle of priority with example.
  - (ii) Comment on the main postulates of Carl Woese classification. How does it differ from Whittaker's classification.
  - (iii) What is tautonym? Give an example.

3+(3+2)+(1+1)

- (d) (i) Write about the pathogenicity and control measures of Ascaris lumbricoides.
  - (ii) Briefly describe Miracidium and Cercaria larvae mentioning their occurrence. (3+2)+(2½×2)
- (e) (i) What is atoll?
  - (ii) Briefly describe any two theories of coral reef formation.
  - (iii) State the diagnostic features of Trematoda and Cestoidea with example. 1+(2½×2)+(2+2)