

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 :

- (a) Distinguish between microtaxonomy and macrotaxonomy.
- (b) What are preconjunctants and exconjunctants?
- (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 :

- (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)
- (b) (i) Explain the pre-erythrocytic schizogony of *Plasmodium vivax*.
- (ii) What are Schuffner's dots?
- (iii) Compare Calcarea and Demospongiae with examples. 4+

Please Turn C

- (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. $(3+2)+(2\frac{1}{2}\times 2)$
- (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. $1+(2\frac{1}{2}\times 2)+(2+2)$
-