

**U.G. 1st Semester Examination - 2021**

**ZOOLOGY**

**[HONOURS]**

**Course Code : ZOOL-H-CC-T-02**

Full Marks : 40

Time : 2½ Hours

*The figures in the right-hand margin indicate marks.*

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

1. Answer any **five** questions of the following:

2×5=10

- a) What is the difference between commissure and connective?
- b) What is moulting?
- c) Why *Peripatus* is called a connecting link?
- d) What is madreporite?
- e) What is plastron in insects?
- f) Give two distinguishing features of the class Polychaeta.
- g) What is chiastoneury?

2. Answer any **two** questions of the following:

5×2=10

- a) Describe any two larval forms found in Echinodermata. 2½×2=5
- b) Describe hormonal control of metamorphosis in insects.
- c) What is torsion? Describe the mechanism of torsion in gastropods. 2+3=5
- d) Describe water vascular system in Asteroidea with a proper diagram.

3. Answer any **two** questions of the following:

10×2=20

- a) How many types of nephridia are found in annelids? Describe the structure of septal nephridia with a diagram. Describe the significance of echinoderm larvae. 2+4+4=10
- b) What is holopneustic tracheal system? Describe the mechanism of tracheal respiration in insects with suitable diagrams. Distinguish between Protostomia and Deuterostomia. Describe the enterocoel theory of coelom formation proposed by Lankester (1875).

2+3+2+3=10

- c) Write a short note on the evolutionary significance of Onychophora. Describe various caste systems of a termite colony.  $5+5=10$
- d) Distinguish between protonephridia and metanephridia. Write a short note on various segmental organs in annelids with diagrams. Describe holometabolous metamorphosis in insects.  $2+5+3=10$
-