



'समानो मन्त्रः समितिः समानी'

UNIVERSITY OF NORTH BENGAL
B.Sc. Honours 2nd Semester Examination, 2023

CC3-ZOOLOGY

Time Allotted: 2 Hours

Full Marks: 40

The figures in the margin indicate full marks.

1. Answer any **five** questions from the following: 1×5 = 5
 - (a) Define coelom.
 - (b) Give two salient features of Monoplacophora.
 - (c) What are holometabolous insects? Give an example.
 - (d) What is 'Aristotle's Lantern'?
 - (e) Name one insect hormone and its role in metamorphosis.
 - (f) Give an example of heteronomous metamerism.
 - (g) What is ommatidium?
 - (h) What is stomochord?

2. Answer any **three** questions from the following: 5×3 = 15
 - (a) Write down the salient features of Phylum Annelida. Give two examples from each classes. 3+2
 - (b) Write a short note on the evolutionary significance of trochophore larva.
 - (c) Discuss on affinities of *Peripatus* sp.
 - (d) Write two theories on the evolution of metamerism.
 - (e) Write a note on the affinities of Echinodermata with chordates.

3. Answer any **two** questions from the following: 10×2 = 20
 - (a) Discuss the structure of a typical nephridium. Describe its types and functions in annelids. 3+5+2
 - (b) Define torsion. Discuss torsion as encountered in Gastropoda. Comment on its significance. 2+5+3
 - (c) Write down the diagnostic characters of Phylum Echinodermata and classify upto class level with suitable examples (two from each class). 3+7
 - (d) Write down characteristic features of Phylum Hemichordata. Discuss on its relationship with non-chordates and chordates. 4+(3+3)

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