B.Sc. 2nd Semester (Honours) Examination, 2023 (CBCS)

Subject : Zoology

Course : CC-III

Time: 2 Hours   **Full Marks: 40**

The figures in the margin indicate full marks.
Candidates are required to give their answers in their
own words as far as applicable.

Group-A

1. Answer *any five* from the following questions: 2×5=10

    (a) What is clitellum? Where is it found?   1+1

    (b) Which is the largest phylum of the animal kingdom? Give two salient characteristics of the phylum.   1+1

    (c) Differentiate between true coelom and pseudo-coelom.

    (d) State the phyla and classes of the following animals.   ½×4=2

        (i) Sea mouse

        (ii) Earthworm

        (iii) Leech

        (iv) Sea cucumber

    (e) Name an animal having 'ink gland'. State its importance.   1+1

    (f) What do you mean by holometabolous development?

    (g) What is tornaria larva?

    (h) What are meant by prosoma and ophisthosoma? Where are those found?   1+1

Group-B

2. Answer *any two* from the following questions: 5×2=10

    (a) Mention the salient features of the following classes and provide an example of each: 2½×2

        (i) Arachnida

        (ii) Insecta

    (b) Briefly describe about the aquatic mode of respiration in *Pila* sp.

    (c) Write a short note on the larval forms of Echinodermata.

    (d) Briefly discuss the relationship of Hemichordata with both non-chordates and chordates.

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Group-C

3. Answer *any two* from the following questions: 10×2=20

   (a) Describe the water-vascular system in Asteroidea with suitable diagram. 7+3

   (b) What is metamerism? Give an account of origin and evolution of metamerism in Annelids.

   1+4+5

   (c) What do you understand by eusociality? State the adaptive advantages of this behaviour. How did eusociality developed among insects? 2+4+4

   (d) Mention the salient feature of the phylum Mollusca. What is torsion? With diagrammatic illustration describe torsion in gastropods. 1+2+7

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