

2022

Time - 3 hours

Full Marks - 60

*Answer all groups as per instructions.
Figures in the right hand margin indicate marks.
Draw labelled diagrams wherever necessary.*

GROUP - A

1. Answer all questions and fill in the blanks as required. [1 × 8]
- (a) _____ numbers of Tiedmann's bodies are present in the ring canal of Asterias.
- (b) Name the respiratory organ in Scorpion.
- (c) Spider belongs to class _____ of phylum Arthropoda
- (d) The type of coelom found in Arthropods is called _____
- (e) Name the Annelid commonly called sea-mouse.
- (f) The innermost layer of pearl is called _____ layer.
- (g) Which Mollusc is commonly called 'Devil fish' ?
- (h) _____ is the common larval form of Annelids.

[2]

GROUP - B

2. Answer any eight of the following within two or three sentences each. [1½ × 8

- (a) What is torsion ?
- (b) What is Mantle ?
- (c) What are Ommatidia ?
- (d) What are nephridia ?
- (e) What are osphradia ?
- (f) Name the larval forms of molluscs.
- (g) Name the various castes in Honey bees.
- (h) Define schizocoel and enterocoel.
- (i) What is radula ? What is its function ?
- (j) What are epipodites ?

GROUP - C

3. Answer any eight of the following within 75 words each. [2 × 8

- (a) Give characteristic features of class Polychaeta of Phylum Annelida. Give examples.

- (b) Explain the structure of Pearl.
- (c) Give general characters with examples of class Arachnida of Phylum Arthropoda.
- (d) Give a brief note on evolutionary significance of Trochophore larva.
- (e) What is moulting in Arthropods ?
- (f) Write down the characters of class Asteroidea with examples of Phylum Echinodermata.
- (g) Give a brief note on structure of compound eye.
- (h) Write down the affinities of Echinodermata with Chordata.
- (i) Write down the general characters of phylum Mollusca.
- (j) Write a note on Bipinnaria larva.

GROUP - D

Answer all questions within 500 words each.

- 4. Give an account of various larval forms in Echinodermata. [6]
- 5. Write a note on Respiration in Arthropoda. [6]
- 6. Write down general characteristic features of Onychophora. Add a note on its evolutionary significance. [6]

[4]

7. Explain Respiration in Mollusca giving suitable examples. [6]
8. Explain mechanism of 'Torsion in Gastropoda'. [6]
9. Write a note on water-vascular system in Asteroidea. [6]
10. Write a note on Metamerism in Annelids. [6]