

[Time: 3Hours]

[Marks:100]

Please check whether you have got the right question paper.

- N.B:
1. All questions are compulsory.
 2. Figures to the right indicate full marks.
 3. Draw neat and labeled diagram wherever necessary.
 4. Answer the questions in order.

- Q.1** Attempt **any two:** **20**
- a. Explain in detail the different levels of organization from cell to organism.
 - b. Give an account of metamerism.
 - c. Describe the characteristic features of different phyla and classes of subkingdom Protozoa and name one example from each class.
- Q.2** Attempt **any two:** **20**
- a. Describe in detail the characteristic features of phylum Porifera and add a note on class Calcarea.
 - b. Enlist the salient features of phylum Platyhelminthes and explain class Turbellaria with example.
 - c. Give a detailed classification of phylum Cnidaria with examples from each class.
- Q.3** Attempt **any two:** **20**
- a. Classify phylum Annelida with salient features and description of one example from each class.
 - b. Give a detailed account of class Gastropoda and class Pelecypoda and describe one example from each.
 - c. Describe the example of class Chilopoda and class Diplopoda of phylum Arthropoda with salient features of both classes.
- Q.4** Attempt **any two:** **20**
- a. Describe the general characters, classification, habitat and habit of *Sepia*.
 - b. Give an account of digestive system of *Sepia* with neat labeled diagram.
 - c. Explain the respiratory and excretory systems of *Sepia*.
- Q.5** Attempt **any four:** **20**
- a. Define coelom and explain its formation by different methods.
 - b. Describe Miracidium and Redia larvae of liver fluke.
 - c. Write a note on *Taenia solium*.
 - d. Describe class Holothuroidea with example.
 - e. Describe *Peripatus* and explain it as a connecting link.
 - f. Explain the female reproductive system of *Sepia*.
