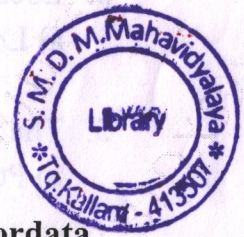


Total No. of Printed Pages: 2

**SUBJECT CODE NO: - Y-2190**  
**FACULTY OF SCIENCE AND TECHNOLOGY**  
**B.Sc. (PATTERN-2013) (F.Y SEM II)**  
**Examination April / May - 2024**



**Zoology Paper-IV Arthropod to Echinodermata and Protochordata**

[Time: 1:30 Hours]

[Max. Marks:50]

Please check whether you have got the right question paper.

N. B

- 1) Attempt all questions.
- 2) Illustrate your answer with suitable labelled diagram.

**Q.1** Describe in detail nervous system of Prawn.

20

OR

Give an account of digestive system of cockroach.

**Q.2** Explain in detail water vascular System of sea star.

20

OR

Write short notes:-

- a) Uropod in Prawn.
- b) Mouth parts of Cockroach.
- c) Heart of Pila.
- d) Morphology of Herdmania.
- e) General characters of protochordata.
- f) Brachiolaria larva.

**Q.3** Select and write correct answer from the given alternatives in each sub Question

10

1. Statocyst present in \_\_\_\_\_.  
 a) Antenna                      b) Antennule                      c) Maxilla                      d) Mandible
2. Number of paired spiracle in Cockroaches are.  
 a) Two                      b) Three                      c) Six                      d) Ten.
3. Respiratory pigment in Pila is \_\_\_\_\_.  
 a) Haemoglobin                      b) Erythrocin  
 c) Haemo cyanin                      d) None

4. Locomotion in sea star is by \_\_\_\_\_  
a) Lobopodia      b) Pseudopodia      c) Tube feet      d) Uropod.
5. The salivary gland of cockroach secret \_\_\_\_\_  
a) Ptyalin      b) Amylase      c) Trypsin      d) Pepsin
6. In Pila fertilization is internal and development is \_\_\_\_\_  
a) Internal  
b) External  
c) Partially internal and Partially external  
d) None of these.
7. Respiratory organ of sea star is \_\_\_\_\_  
a) Pedicellariace      b) Tube feet  
c) Papulae      d) Podia.
8. Cephalochordates are \_\_\_\_\_  
a) Filter feeder      b) Predator  
c) Carnivores      d) All.
9. Protochordata found in \_\_\_\_\_  
a) Freshwater      b) Marine water  
c) Both a & b      d) None of these.
10. In hemichordates body is typically divided into \_\_\_\_\_  
a) Head neck and trunk      b) Head trunk and tail  
c) Proboscis, collar and trunk      d) Proboscis, collar and tail.

