

**PSG COLLEGE OF ARTS & SCIENCE**  
(AUTONOMOUS)  
**BSc DEGREE EXAMINATION DECEMBER 2024**  
(First Semester)

Branch - **ZOOLOGY**

**INVERTEBRATA**

Time: Three Hours

Maximum: 75 Marks

**SECTION-A (10 Marks)**

Answer **ALL** questions

**ALL** questions carry **EQUAL** marks

(10 × 1 = 10)

| Module No. | Question No. | Question                                                                                                                                                                                       | K Level | CO  |
|------------|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-----|
| 1          | 1            | The most common asexual reproduction exhibited by paramecium is -----<br>a) Multiple Fission                      b) Binary Fission<br>c) Mono Fission                         d) Poly Fission | K1      | CO1 |
|            | 2            | Sponges belong to the phylum-----<br>a) Protozoa b) porifera c) coelenterate d) mollusca                                                                                                       | K2      | CO2 |
| 2          | 3            | The organ for offense and defense in obelia is -----<br>a) Cnidoblast                      b) Intestinal Cells<br>c) Glandular Cells   d) Longitudinal Cells                                   | K1      | CO1 |
|            | 4            | Which part of <i>Taenia solium</i> helps it to attach to the intestinal wall of the host?<br>a) Scolex   b) Proglottid c) Rostellum   d) Strobila                                              | K2      | CO2 |
| 3          | 5            | Metamerism is seen in the phylum-----<br>a) Coelenterata                      b) Porifera<br>c) Annelida                              d) Arthropoda                                            | K1      | CO1 |
|            | 6            | Which segment of <i>Megascolex mauritii</i> contains the clitellum?<br>a) 1-5                      b) 7-11                      c) 14-17                      d) 18-21                         | K2      | CO2 |
| 4          | 7            | The first three pairs of walking legs are----- legs.<br>a) Non- chelate                      b) Chelate<br>c) Uropods                              d) Mandibles                                | K1      | CO1 |
|            | 8            | Which larva is finally transformed into prawn?<br>a) Nauplius                      b) Metanauplius<br>c) Mysis                                  d) Zoea                                        | K2      | CO2 |
| 5          | 9            | The blood of pila is blue in colour due to the presence of -----<br>a) Haemoglobin                      b) Haemocyanin<br>c) Haemoerythrin                      d) Amoebocytes                 | K1      | CO1 |
|            | 10           | Locomotory organs of star fish -----<br>a) Tube feet                      b) Polion Vesicles<br>c) Madreporite                      d) Stone canal                                             | K2      | CO2 |

Cont...

**SECTION - B (35 Marks)**Answer **ALL** questions**ALL** questions carry **EQUAL** Marks

(5 × 7 = 35)

| Module No. | Question No. | Question                                       | K Level | CO  |
|------------|--------------|------------------------------------------------|---------|-----|
| 1          | 11.a.        | Summarize the Cyclosis in Paramecium.          | K2      | CO2 |
|            |              | (OR)                                           |         |     |
|            | 11.b.        | Narrate the external features of Leucosolenia. | K3      | CO3 |

|   |       |                                                                               |    |     |
|---|-------|-------------------------------------------------------------------------------|----|-----|
| 2 | 12.a. | Illustrate the structure of medusa in obelia colony.                          | K3 | CO3 |
|   |       | (OR)                                                                          |    |     |
|   | 12.b. | Describe the external features of <i>Taenia solium</i> .                      | K3 | CO3 |
| 3 | 13.a. | Enlist any ten salient features of phylum Annelida.                           | K3 | CO3 |
|   |       | (OR)                                                                          |    |     |
|   | 13.b. | With a neat diagram explain the life history of earthworm.                    | K4 | CO4 |
| 4 | 14.a. | List out the unique characters of phylum Arthropoda.                          | K4 | CO4 |
|   |       | (OR)                                                                          |    |     |
|   | 14.b. | Describe the Morphology of <i>Penaeus</i> .                                   | K5 | CO5 |
| 5 | 15.a. | What are the important sense organs of <i>Pila</i> and write their functions? | K5 | CO4 |
|   |       | (OR)                                                                          |    |     |
|   | 15.b. | Explain the structure of a typical pedicellaria. Add a note on its functions. | K6 | CO5 |

**SECTION - C (30 Marks)**Answer **ANY THREE** questions**ALL** questions carry **EQUAL** Marks

(3 × 10 = 30)

| Module No. | Question No. | Question                                                       | K Level | CO  |
|------------|--------------|----------------------------------------------------------------|---------|-----|
| 1          | 16           | Outline the locomotion exhibited by the protozoans.            | K2      | CO2 |
| 2          | 17           | "Coral reefs are an ideal habitat for marine animals"- Justify | K4      | CO4 |
| 3          | 18           | "Vermiculture helps in the recycling of wastes"- Discuss.      | K5      | CO5 |
| 4          | 19           | Elaborate the process of culturing the Prawn.                  | K5      | CO5 |
| 5          | 20           | Propose the techniques involved in Pearl culture.              | K6      | CO6 |

Z-Z-Z

END