

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2025
(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 process by which a protozoan engulfs solid food particles like bacteria is called (a) Pinocytosis (b) Osmotrophy (c) Phagocytosis (d) Holophytic nutrition	K1	CO1
	2	The hair-like structures covering the body of Paramecium are known as (a) Pseudopodia (b) Flagella (c) Cilia (d) Trichocysts	K2	CO1
2	3	<u>Wuchereria bancrofti</u> which cause lymphatic filariasis, are types of (a) Flukes (b) Tapeworms (c) Roundworms (Nematodes) (d) Trematodes	K1	CO2
	4	The body of the <u>Taenia solium</u> (tapeworm) consists of numerous segments, each known as a (a) Integument (b) Cysticercus (c) Proglottid (d) Oncosphere	K2	CO2
3	5	In <u>Megascolex mauritii</u> , the clitellum is primarily involved in (a) Digestion and absorption of food (b) Respiration through the skin (c) Excretion of waste products (d) Reproduction and regeneration	K1	CO3
	6	In earthworm, the mouth is located on (a) Stomium (b) Peristomium (c) Prostomium (d) Protostomium	K2	CO3
4	7	Peripatus is considered a connecting link between which two major groups of animals? (a) Mollusca and Echinodermata (b) Annelida and Arthropoda (c) Cnidaria and Porifera (d) Reptilia and Mammalia	K1	CO4
	8	What is the correct sequence of <u>larval</u> stages in the life history of Penaeus? (a) Nauplius → Mysis → Protozoca → Post-larva (b) Nauplius → Protozoca → Mysis → Post-larva (c) Protozoca → Nauplius → Mysis → Post-larva (d) Mysis → Nauplius → Protozoca → Post-larva	K2	CO4
5	9	Which class of molluscs is characterized by a shell of eight dorsal plates? (a) Gastropoda (b) Bivalvia (c) Polyplacophora (d) Scaphopoda	K1	CO5
	10	What is the main characteristic feature of starfish, which is also a unique system in the animal kingdom? (a) Pseudocoelom (b) Water vascular system (c) Nerve net (d) Gills	K1	CO5

Cont...

SECTION - B (35 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

 $(5 \times 7 = 35)$

Module No.	Question No.	Question	K Level	CO
1	11.a.	Draw the diagram and label the paramaecium caudatum.	K3	CO1
		(OR)		
	11.b.	Explain the lifecycle of Leucosolcnia.		
2	12.a.	What is scolex with suitable diagram?	K3	CO2
		(OR)		
	12.b.	List out the Helminthus worms.		
3	13.a.	Analyzes the general character of phylum Annelida.	K3	CO3
		(OR)		
	13.b.	What is Vermiculture and make the uses of Vermiculture?		
4	14.a.	Classify the phylum Arthropoda with give examples.	K3	CO4
		(OR)		
	14.b.	List out the affinities of Pcripatus.		
5	15.a.	Explain the morphological structure of <i>Pila globossa</i> .	K3	CO5
		(OR)		
	15.b.	Explain the structure of <i>Balanoglossus</i>		

SECTION -C (30 Marks)

Answer ANY THREE questions

ALL questions carry EQUAL Marks

 $(3 \times 10 = 30)$

Module No.	Question No.	Question	K Level	CO
1	16	Explain the locomotion in Protozoa.	K4	CO1
2	17	Describe the lifecycle of <i>Obelia geniculata</i> .	K4	CO2
3	18	Illustrate the external morphology of <i>Megascolex marutii</i> .	K4	CO3
4	19	Diagramatic representation of <i>Penaeus monodon</i> .	K4	CO4
5	20	Explain the water vascular system of star fish.	K4	CO5