

Reg. No.:



Name:

University of Kerala

U8880

Second Semester FYUGP Degree Examination, April 2025

Discipline Specific Core Course

ZOOLOGY

UK2DSCZOO101 - Non-Chordate Diversity -Part II

Academic Level: 100-199

Time: 1 Hour 30 Minutes(90 Mins.)

Max. Marks: 42

Part A. 6 Marks.Time:6 Minutes.(Cognitive Level:Remember(RE)/Understand(UN)) Objective Type. 1 Mark Each.Answer all questions

Qn No.	Question	CL	CO
1	Which is not the function of tube-feet Options : A)a) Locomotory B)b) Food collection C)c) Respiratory D)d) Excretion	RE	1
2	Name the anticoagulant that is secreted by the salivary glands of Hirudinaria. Options : A)a)Heparin B)b) Hirudin C)c) Antithrombin D) d) Warfarin	RE	1
3	What distinguishes insects from other arthropods? Options : A)A. The presence of a chitinous exoskeleton B)B. A body is divided into three segments: head, thorax, and abdomen C) C. Jointed appendages D)D. Open circulatory system	UN	2
4	Choose the organism with jointed appendages and chitinous exoskeleton. Options : A)a.Peripatus B)b. Chiton C)c. Penaeus D)d. Nereis	UN	1
5	The glandular girdle that is found in adult oligochaetes is described as..... Options : A)a)Metameres B)b) Clitellum C)c) Septum D)d) Nodulus	UN	2
6	Identify the echinoderm that possesses Aristotle's Lantern as a feeding structure: Options : A)a) Starfish B) b) Sea cucumber	UN	3

Qn No.	Question	CL	CO
	C) c) Sea urchin D) d) Brittle star		

Part B.8 Marks.Time:24 Minutes.(Cognitive Level:Understand(UN)/Apply(AP))Short Answer. 2 marks each.Answer all questions

Qn No.	Question	CL	CO
7	Describe the role of tube feet in feeding and respiration.	UN	1
8	Match the following		UN1
	A	B	
	1. Bipinnaria	a. Brittle star	
	2. <u>Doliolaria</u>	b. Sea cucumber	
	3. <u>Ophiopleuteus</u>	c. Sea Lily	
	4. Auricularia	d. Starfish	
9	Prepare the branchial formula of the prawn	AP	1
10	Explain how hirudin helps a leech in feeding.	AP	1

Part C. 28 Marks.Time:60 Minutes (Cognitive Level:Apply(AP)/Analyse(AN)/Evaluate(EV)/Create(CR)) Long Answer:7 marks each.Answer all 4 Questions choosing among options * within each question

Qn No.	Question	CL	CO
11	A) Describe the structural morphology and parasitic adaptations of <i>Hirudinaria</i> that facilitate its mode of life. OR B)	AP	4, 1
	Explain the general characteristics of Phylum Onychophora. Comment on its importance with a suitable example.		
12	A) Classify Phylum Mollusca up to classes OR B) Explain the general characteristics of phylum Mollusca and discuss its economic importance	AN	1, 4
13	A) Evaluate the impact of <i>Sacculina</i> 's parasitic castration on its host by critically analyzing the physiological and behavioural changes induced and assessing the adaptive significance of its larval stages in the overall lifecycle.	EV	4, 1
	OR B) Recall the different classes of Arthropoda and list their distinguishing features.		
14	A) Briefly explain the larval forms of Echinoderms OR B) Explain the water vascular system in Echinoderms.	CR	2, 4