

**SECOND SEMESTER B.Sc. DEGREE EXAMINATION, MAY 2017**

(CUCBCSS-UG)

Core Course—Zoology

ZOL 2B 02—ANIMAL DIVERSITY : NON CHORDATA—II

Time : Three Hours

Maximum : 80 Marks

**Part A***Answer all questions.**(One word questions, 1 mark each).*

1. Define hermaphroditism.
2. What are malpighian tubules ?
3. Define epitoky.
4. What is osphradium ?
5. What is setae ?
6. What is peristomium ?
7. Define coelom.
8. What is radula ?
9. Name an echinoderm in which the Aristotle's lantern is found.
10. What is thelycum ?

(10 × 1 = 10 marks)

**Part B***Answer any ten questions.**(Short answer question. 2 marks each)*

11. What is ecdysis (moulting) ? What is its significance ?
12. What is mantle or pallium ? What is its significance ?
13. Why peripatus is regarded as intermediate between annelids and arthropods ?
14. What are pedicellaria ? Mention its function.
15. What are parapodia ? What is their function ?

**Turn over**

16. Write an account of *Lepisma*.
17. What is the biological significance of *Limulus* ?
18. Write an account of *Chiton*.
19. What is *petasma* ? Mention its function.
20. What are chelate legs in *Penaeus* ? Mention its function.
21. What is parasitic castration ?
22. Draw and label the mandibles in prawn.

(10 × 2 = 20 marks)

### Part C

Answer any **five** questions.  
(Paragraph questions. 6 marks each).

23. Give an account of excretory system of *Penaeus*.
24. Name a blood sucking annelid ? Mention its blood sucking adaptations.
25. Write short notes on *Balanoglossus*.
26. Comment on the biological significance of Trilobite.
27. Write an account on living fossil with examples.
28. Give an account of *Perna*. Mention its economic importance.
29. Write an account on mantle complex of *Pila*.
30. Enlist any *six* characteristic features of phylum hemichordata.

(5 × 6 = 30 marks)

### Part D

Answer any **two** questions.  
(Essay questions. 10 marks each)

31. Enumerate the general characters and outline classification of phylum mollusc up to classes with suitable examples.
32. Briefly describe the cephalic and thoracic appendages of *Penaeus* with diagram.

33. Give general characters of phylum echinodermata and its classes with example.
34. Write notes on any *five* of the following :
- (i) Sepia.
  - (ii) Nereis.
  - (iii) Earthworm.
  - (iv) Holothuria (sea cucumber).
  - (v) Pila.
  - (vi) Bonellia.

(2 × 10 = 20 marks)