

(FOR THE CANDIDATES ADMITTED

25UZY101

DURING THE ACADEMIC YEAR 2025 – 2028 ONLY)

REG.NO. :

N.G.M. COLLEGE (AUTONOMOUS): POLLACHI

END-OF-SEMESTER EXAMINATIONS: NOVEMBER 2025

B.Sc Zoology (AIDED)

MAXIMUM MARKS: 75

SEMESTER - I

TIME : 3 HOURS

PART-III

25UZY101 – NON-CHORDATA

SECTION – A ($10 \times 1 = 10$ marks)

Answer the following questions.(K1)

- Which of the following organisms exhibits binary fission?
a) *Obelia* b) *Leucosolenia* c) *Paramecium* d) *Taenia*
- The canal system is characteristic of which phylum?
a) Coelenterata b) Porifera c) Mollusca d) Annelida
- Which of the following worms has separate sexes (dioecious)?
a) *Ascaris lumbricoides* b) *Megascolex mauritii*
c) *Taenia solium* d) *Pila globosa*
- Match the following:

A. Peripatus	1. Water vascular system
B. Asterias	2. Connecting link
C. Pila	3. Torsion
D. Obelia	4. Colonial form

 - A–2, B–1, C–3, D–4
 - A–1, B–2, C–4, D–3
 - A–4, B–3, C–2, D–1
 - A–3, B–4, C–1, D–2
- Torsion in molluscs refers to: _____
a) Formation of larva
b) Development of shell
c) Twisting of visceral mass
d) Coiling of tentacles

ANSWER THE FOLLOWING IN ONE WORD OR A SENTENCE:(K2) (5 × 1 = 5 marks)

- Name the structure that helps locomotion *Paramecium caudatum*.
- State one function of the collar cells in sponges.
- What is the type of coelom present in Annelida?
- Mention any one commercial product obtained from insects.
- Define madreporite.

SECTION – B (5 X 5 = 25 MARKS)**ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.(K3)**

11. (a) Describe the process of conjugation in *Paramecium caudatum*.
(OR)
(b) List any five economic importance of protozoa.
12. (a) With a neat labeled diagram, describe the structure of *Leucosolenia*.
(OR)
(b) Explain any five differences between polyp and medusa forms of Coelenterates.
13. (a) Clarify the excretory systems of *Ascaris lumbricoides*.
(OR)
(b) Point out any five characteristics of metamerism in Annelids.
14. (a) Describe the structure and function of mouthparts in *Periplaneta americana*.
(OR)
(b) Comment on Peripatus and their significance.
15. (a) Explain torsion in molluscs with a labeled sketch.
(OR)
(b) Describe the larval forms of echinoderms and their significance.

SECTION – C**(5 X 8 = 40 MARKS)****ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS:(K4 OR K5)**

16. (a) Discuss economic importance of protozoa.
(OR)
(b) Explain the life cycle of *Plasmodium vivax* with labeled diagrams.
17. (a) Describe the structure and life cycle of *Obelia geniculata* with neat diagrams.
(OR)
(b) Criticize the parasitic adaptation in Helminth worm.
18. (a) Enlighten the reproductive system and life cycle of *Ascaris lumbricoides* with diagrams.
(OR)
(b) Designate the structure and functions of the digestive systems of *Megascolex mauritti*.
19. (a) Explain the male reproductive systems of *Periplaneta Americana* with a neat illustration.
(OR)
(b) Classify the types of diseases transmitted by mosquitoes, fleas, and ticks.
20. (a) Describe the structure and functions of the water vascular system in *Asterias rubens*.
(OR)
(b) Explicate the structure and functions of the female reproductive system in *Pila globosa*.
