

NGM COLLEGE (AUTONOMOUS) POLLACHI

END-OF-SEMESTER EXAMINATIONS: DECEMBER- 2022

B. Sc-Botany

MAXIMUM MARKS: 50

I SEMESTER

TIME: 3 HOURS

PART - III

INVERTEBRATES AND VERTEBRATES

SECTION – A **(10 X 1 = 10 MARKS)**

ANSWER THE FOLLOWING QUESTIONS.

(K1)

ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES

(K2)

6. What is comb jelly?
7. Comment on Hexapoda
8. Write briefly about Pedicellaria
9. Explain the features of Flying frog
10. State the functions of Kangaroo pouch.

SECTION – B **(5 X 3 = 15 MARKS)**

**ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.
(Qn. No. 11 to 15 Questions for Short Answers with internal choices) (K3)**

11. a) Describe the mode of feeding in *paramecium caudatum*.
(OR)
b) Write the neat Sketch, describe the structure of Obelia.

12. a) Sketch the structure of *Teania solium*.
(OR)
 b) Describe the digestive system of *Periplanata americana*.

13. a) Explain the digestive system of *Pila*.
(OR)
 b) Describe the external morphology of *Asterias rubens* with a diagram.

14. a) List out the general characters of Prochordata.
(OR)
 b) Draw and explain pulmonary respiration of *Rana hexadactyla*.

15. a) Sketch the external morphology of calotes with a neat diagram.
(OR)
 b) Explain the arterial system of rabbit with a neat sketch.

SECTION – C (5 X 5 = 25 MARKS)

ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.

(Qn. No. 16 to 20 Questions for Long Answers with internal choices (K4 (Or) K5)

16. a) How does conjugation occur in paramecium. Explain its significance
(OR)
 b) Describe the life cycle of *Obelia* with a diagram.

17. a) Describe the reproductive system and life cycle of *Taenia solium*.
(OR)
 b) Discuss in detail on the nervous system of cockroach.

18. a) Explain in detail about respiratory system of *Pila*.
(OR)
 b) State functions of water vascular system in *Asterias rubens*.

19. a) Explain general characters of *Amphioxus* and *Balanoglossus*.
(OR)
 b) Describe the urinogenital system of shark.

20. a) Discuss in detail on the functional aspects of flight muscles in a bird?
(OR)
 b) Give an account on the male reproductive system of rabbit with a neat sketch