

131**III**

Total No. of Questions – 21

Regd.

Total No. of Printed Pages – 2

No.

--	--	--	--	--	--	--	--	--	--

Part – III
ZOOLOGY, Paper-I
(English Version)

Time : 3 Hours]**[Max. Marks : 60****Note :** Read the following instructions carefully :

- (1) Answer **all** the questions of Section – A. Answer any **six** questions in Section – B and answer any **two** questions in Section – C.
- (2) In Section – A, questions from Sr. Nos. **1 to 10** are of Very Short Answer Type. Each question carries **two** marks. Every answer may be limited to **5** lines. Answer all questions at **one** place in the **same** order.
- (3) In Section – B, questions from Sr. Nos. **11 to 18** are of Short Answer Type. Each question carries **four** marks. Every answer may be limited to **20** lines.
- (4) In Section – C, questions from Sr. Nos. **19 to 21** are of Long Answer Type. Each question carries **eight** marks. Every answer may be limited to **60** lines.
- (5) Draw **labelled** diagrams wherever necessary in Sections – B and C.

SECTION – A**Note :** Answer **all** the questions in **5** lines each :**10 × 2 = 20**

1. What is trinomial nomenclature ? Give an example.
2. What are retroperitoneal organs ?
3. Mention the animals that exhibited a 'tube-within-a tube' organisation for the first time. Name their body cavity.

4. What are microglia and what is their origin ? Add a note on their functions.
5. What are the functions of Canal system of sponges ?
6. How do you distinguish a male frog from a female frog ?
7. Define conjugation with reference to ciliates. Give two examples.
8. Draw a labelled diagram of T.S. of Flagellum.
9. Define incubation period. What is its duration in life cycle of *Plasmodium vivax* ?
10. Distinguish between lotic and lentic habitats.

SECTION – B

Note : Answer any six questions in 20 lines each :

6 × 4 = 24

11. What is the 'evel quartet' ?
12. Describe the structure of a skeletal muscle.
13. What are the salient features exhibited by polychaetes ?
14. Name the four "hallmarks" of chordates and explain the principal function of each of them.
15. Describe the process of longitudinal binary fission in Euglena.
16. 'Prevention is better than cure.' Justify with regard to TDA abuse.
17. Draw a neatly labelled diagram of the mouth parts of the cockroach.
18. Write a short note on DFC. Give its significance in a terrestrial ecosystem.

SECTION – C

Note : Answer any two questions in 60 lines each :

2 × 8 = 16

19. Describe the structure and life cycle of *Ascaris lumbricoides* with the help of a neat labelled diagram.
20. Describe the respiratory system of Cockroach with the help of neat labelled diagram.
21. List out the major air pollutants and describe their effects on human beings.