

Total No. of Questions – 21

Total No. of Printed Pages – 2

Regd.

No.

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**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. Define the term histology. What is it otherwise called ?
2. Radial symmetry is an advantage to the sessile or slow moving organisms. Justify this statement.
3. Distinguish between a tendon and a ligament.
4. What is the haematocrit value ?
5. Distinguish between amphids and phasmids.

6. What are pneumatic bones ? How do they help birds ?
7. List any two differences between a flagellum and a cilium.
8. Why do we refer to the offspring, formed by asexual method of reproduction, a clone ?
9. The eggs of *Ascaris* are called 'Mammillated eggs'. Justify.
10. What is cyclomorphosis ? Explain its importance in *Daphnia*.

### SECTION – B

**Note :** Answer any **six** questions in **20** lines each.

$6 \times 4 = 24$

11. Explain in brief 'Biodiversity Hot Spots'.
12. Describe the structure of a multipolar neuron.
13. What are the salient features of the echinoids ?
14. List out eight characteristics that help distinguish a fish from the other vertebrates.
15. Give an account of pseudopodia.
16. What are the adverse effects of tobacco ?
17. Draw a neat and labelled diagram of the salivary apparatus of cockroach.
18. What are the deleterious effects of depletion of ozone in the stratosphere ?

### SECTION – C

**Note :** Answer any **two** questions in **60** lines each.

$2 \times 8 = 16$

19. Describe the life cycle of *Plasmodium vivax* in mosquito.
20. Describe the respiratory system of cockroach with the help of neat and labelled diagrams.
21. Describe different types of food chains that exist in an ecosystem.