

0131
TS



Total No. of Questions – 21

Total No. of Printed Pages - 2

Regd.

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 in 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 these 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 for questions in Sections – B and C.

SECTION – A

Note : Answer **all** questions in **5** lines each. **10 × 2 = 20**

1. Differentiate between Protostomia and Deuterostomia.
2. What is sesamoid bone ? Give an example.
3. In which animal is the Aristotle's lantern present ? What is its function ?
4. Name the four extra embryonic membranes.
5. Why do we refer to the offspring formed by asexual method of reproduction, a clone ?
6. Distinguish between lobopodium and filopodium.

7. What is meant by nocturnal periodicity with reference to the life history of a nematode parasite you have studied ?
8. Why is the head in cockroach called hypognathous ?
9. What is storage excretion ?
10. Define mutualism. Give one example.

SECTION – B

Note: Answer any six questions in 20 lines each.

6 × 4 = 24

11. Define species. Explain the various aspects of species.
12. What are the chief characters of crustaceans ?
13. What are the modifications that are observed in birds that help them in flight ?
14. What are lateral appendages ? Based on their presence or absence, write the various types of flagella giving atleast one example for each type with diagrams.
15. Distinguish between addiction and dependence.
16. Draw a neat labelled diagram of the salivary apparatus of cockroach.
17. Describe the structure and function of the heart in *Periplaneta*, with the help of a diagram.
18. How do marine animal adapt to hypertonic seawater ?

SECTION – C

Note : Answer any two questions in 60 lines each.

2 × 8 = 16

19. Classify and describe the epithelial tissues on the basis of the structural modification of cells. Give examples.
20. Describe the life cycle of *Plasmodium vivax* in mosquito, with the help of diagrams.
21. Describe lake as an ecosystem giving examples for the various zones and the biotic components in it.