

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 :

- (i) Answer ALL the questions of Section A. Answer any SIX questions in Section B and answer any TWO questions in Section C.
- (ii) In Section A, questions from Sl. No. 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.
- (iii) In Section B, questions from Sl. Nos. 11 to 18 are of short answer type. Each question carries *four* marks. Every answer may be limited to 20 lines.
- (iv) In Section C, questions from Sl. Nos. 19 to 21 are of long answer type. Each question carries *eight* marks. Every answer may be limited to 60 lines.
- (v) Draw labelled diagrams wherever necessary in Sections B and C.

SECTION-A

10×2=20

Note :— Answer ALL the questions in 5 lines each.

1. What is meant by tautonymy ? Give *two* examples.
2. What is Cephalization ? How is it useful to its possessors ?
3. Distinguish between a tendon and a ligament.
4. What is the haematocrit value ?
5. What is Aristotle's Lantern ? Give *one* example of an animal possessing it.
6. What are pneumatic bones ? How do they help birds ?
7. Distinguish between lobopodium and filopodium. Give an example to each of them.
8. What are dynein arms ? What is their significance ?
9. In which way does tobacco affect the respiration ? Name the alkaloid found in tobacco.
10. Define commensalism. Give *one* example.

SECTION-B

6×4=24

Note :— Answer any SIX questions each in 20 lines.

11. Explain "Rivet popper" hypothesis.
12. Explain Haversian system.
13. What are the chief characters of the crustaceans ?
14. Compare and contrast cartilaginous and bony fishes.
15. Describe the process of transverse binary fission in paramecium.
16. What is the need for parasites to develop special adaptations developed by the parasites.
17. Draw a neat labelled diagram of the mouthparts of Cockroach.
18. Describe 'Greenhouse Effect'.

SECTION-C

2×8=16

Note :— Answer any TWO questions in 60 lines each.

19. Describe the structure and life cycle of *Ascaris lumbricoides* with the help of a neat and labelled diagram.
20. Describe the blood circulatory system of *periplaneta* in detail and draw a neat and labelled diagram of it.
21. Describe different types of food chains that exist in an ecosystem.