

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 does ICZN stand for ?
2. What is monoaxial heteropolar symmetry ? Name the group of animals in which it is the principal symmetry.
3. Distinguish between Brown fat and White fat.
4. What are microglia and what is their origin ? Add a note on their function.
5. What is the function of radula ? Give the name of the group of Molluscs which do not possess a radula.

6. What are Pneumatic bones ? How do they help birds ?
7. What is Kinyety ?
8. Draw a labelled diagram of T.S. of flagellum.
9. Define neoplasia. Give *one* example.
10. What is camouflage ? Give its significance.

SECTION-B

6×4=24

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

11. What are the reasons for greater biodiversity in the tropics ?
12. Describe the structure of skeletal muscle.
13. Mention the general characters of Arachnida.
14. Write *eight* salient features of the class Amphibia.
15. Describe the process of transverse binary fission in Paramecium.
16. What are the adverse effects of tobacco ?
17. Draw a neat labelled diagram of the salivary apparatus of Cockroach.
18. Explain Van't Hoff rule.

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. The blood circulatory system of Periplanata is of open type. Illustrate the statement describing the course of circulation in it.
21. Describe lake as an ecosystem giving examples of the various zones and the biotic components in it.