131

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 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 : $10 \times 2 = 20$

1. What does ICZN stand for ?
2. Define osteon.
3. Draw a labelled diagram of T.S. of flagellum.
4. What are retroperitoneal organs ?
5. How does a mature RBC of a mammal differ from that of other vertebrates ?
6. Mention the advantages of some U.V. rays to us.
7. What do you call the locomotor structures of Nereis ? Why is Nereis called a polychaete ?
8. Distinguish between proter and opisthe.
9. Mention the animals that exhibited a 'tube-within-a-tube' organisation for the first time. Name their body cavity.
10. In which way does tobacco affect the respiration ? Name the alkaloid found in tobacco.

SECTION – B

Note : Answer ***any*** **six** questions in **20** lines each **6 x 4 = 24**

11. Explain 'River Popper' hypothesis.
12. What are the chief characters of of the crustaceans?
13. **Describe the three types of cartilage.**
14. List out eight characteristics that help distinguish a fish from the other vertebrates.
15. Describe the process of longitudinal binary fission in Euglena.
16. Distinguish between hypertrophy and hyperplastia with an example for each.
17. How do marine animals adapt to hypertonic sea water?
18. Draw a neat labelled diagram of the mouth parts of a cockroach.

SECTION – C

Note : Answer ***any*** **two** questions in **60** lines each **2 x 8 = 16**

19. Describe the digestive system of cockroach with the help of a neat labelled diagram.
20. List out the major air pollutants and describe their effects on human beings.
21. Explain the structure and life cycle of entamoeba histolytica with the help of a neat labelled diagram.