Total No. of Questions - 21
Regd.
No.

Total No. of Printed Pages - 2

Part - III
ZOOLOGY, Paper - II
(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 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 in Sections 'B' and 'C'.

SECTION A

 $10 \times 2 = 20$

Answer all questions in 5 lines each.

- 1. Give the dental formula of adult human beings.
- 2. Name the valves that guard the left and right atrioventricular apertures in man.
- 3. What is a triad system?
- 4. What is corpus callosum?
- 5. Which hormone is commonly known as fight and flight hormone?

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- 6. Differentiate between perforins and granzymes.
- 7. What are the functions of Sertoli cells of the seminiferous tubules and the Leydig cells in man?
- What in your view are the reasons for population explosion, especially in India?
- 9. What is apiculture?
- 10. Explain the term, hypophysation.

SECTION B

 $6 \times 4 = 24$

Answer any six questions in 20 lines each.

- 11. What are the functions of liver?
- 12. Explain the process of inspiration and expiration under normal conditions.
- 13. Draw a labelled diagram of the T.S. of the spinal cord of man.
- 14. Write a short note on immunoglobulins.
- 15. How is sex determined in human beings?
- Explain Darwin's theory of natural selection with industrial melanism as an experimental proof.
- 17. Distinguish between homologous and analogous organs.
- 18. Explain the different types of cancers.

SECTION C

 $2 \times 8 = 16$

Answer any two questions in 60 lines each.

- 13. Describe the excretory system of man giving the structure of a nephron.
- 20. Describe the female reproductive system of a woman with the help of a labelled diagram.
- 21. What is crisscross inheritance? Explain the inheritance of one sexlinked recessive character in human beings.

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