

# Senior Intermediate Zoology Model Paper

## 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 **8** 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. Draw a diagram of oxyhaemoglobin dissociation curve.
2. Name the structural and functional units of kidney. What are the two main types of structural units in it?
3. What is a 'motor unit' with reference to muscle and nerve?
4. Name the type of joint between (a) atlas and axis (b) carpal and metacarpal of the human thumb.
5. What are androgens? Which cells secrete them?
6. What is erythropoietin? What is its function?
7. What is amniocentesis? Name any two disorders that can be detected by amniocentesis.
8. Mention the advantages of "Lactational Amenorrhea Method".
9. Mention any four fish by-products.
10. What does ADA stand for? Deficiency of ADA causes which disease?

### SECTION - B

**$6 \times 4 = 24$**

*Answer any six questions in 20 lines each.*

11. Draw a neat labelled diagram of the L.S. of a tooth.
12. What are the major transport mechanisms for  $\text{CO}_2$ ? Explain.
13. Give an account of synaptic transmission.
14. Explain the mechanism by which HIV multiplies and leads to AIDS.
15. Describe erythroblastosis foetalis.
16. Distinguish between homologous and analogous organs.
17. Explain Darwin's Theory of Natural Selection with industrial melanism as an experimental proof.
18. Write about the procedure involved in MRI.

### SECTION - C

**$2 \times 8 = 16$**

*Answer any two questions in 60 lines each.*

19. Describe the structure of the heart of a man. Draw a neat labelled diagram of it.
20. Describe the male reproductive system of a man with the help of a labelled diagram.
21. What is crisscross inheritance? Explain the inheritance of one sex linked recessive character in human.