

# **Junior Intermediate Zoology Model Paper**

## **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 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.
- (iii) 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**.
- (iv) 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**.
- (v) Draw labelled diagrams wherever necessary in Sections 'B' and 'C'.

### **SECTION - A**

**$10 \times 2 = 20$**

**Note: Answer all questions in 5 lines each.**

- 1. What is meant by tautonymy? Give two examples.
- 2. What is monaxial heteropolar symmetry? Name the group of animals in which it is the principal symmetry.
- 3. Name the animals that exhibited a 'tube-within-a-tube' organisation for the first time. Name their body cavity.
- 4. Distinguish between holocrine and apocrine glands.
- 5. Distinguish between amphids and phasmids.
- 6. How do you justify the statement - "Heart in fishes is a branchial heart."?
- 7. Draw a labelled diagram of T.S of flagellum.
- 8. What are dynein arms? What is their significance?
- 9. What do you mean by parasitic castration? Give one example.
- 10. Explain the difference between the 'niche' of an organism and its 'habitat'.

### **SECTION - B**

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

**Answer any six questions in 20 lines each.**

- 11. What is 'Evil Quartet'?
- 12. Describe the structure of a multipolar neuron with the help of a diagram.
- 13. What are the salient features of the echinoids?
- 14. Compare and contrast cartilaginous and bony fishes.
- 15. Describe the process of transverse binary fission in *Paramecium*.
- 16. "Prevention is better than cure". Justify with regard to TDA abuse.
- 17. Draw a neat, labeled diagram of the mouthparts of cockroach.
- 18. Discuss the causes and effects of "Global Warming". What measures need to be taken to control "Global Warming"?

### **SECTION - C**

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

**Answer any two questions in 60 lines each.**

- 19. Describe the life cycle of *Plasmodium vivax* in mosquito with the help of a neat, labeled diagram.
- 20. Describe the blood circulatory system of *Periplaneta* and draw a neat labelled diagram of it.
- 21. Describe different types of food chains that exist in an Ecosystem.