JUNIOR INTER ZOOLOGY (IPE-2011) Model Paper-3

Time: 3 hours

- Note: Read the following instructions carefully.
- (*i*) Answer all the questions of Section-A. Answer ANY SIX questions out of eight in Section-B and answer ANY TWO questions out of three in Section-C.
- (*ii*) In Section-A, questions from Sl. 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 Sl. No.s 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. No.s 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 for questions in Section-B and C.

SECTION-A

I. Very short answer questions

Answer all the following questions. Each answer may be limited to 5 lines.

- 1. What is **tautonymy**? Give one example.
- 2. What are junior synonyms and junior homonyms?
- 3. What is **gnathochilarium**?
- 4. What are **muscle spindles**?
- 5. What are **myonemes**?
- 6. What do you mean by **parasitic castration**?
- 7. Distinguish between primary amoebiasis and secondary amoebiasis.
- 8. What is **true metamerism**?
- 9. How are corpora adiposa of cockroach functionally similar to the liver of vertebrate?
- 10. Describe Van' t Hoff's rule

SECTION-B

II. Short answer questions

Answer any six of the following questions. Each answer may be limited to 20 lines.

- 11. Mention the general characters of Holothuroidea.
- 12. Explain Haversian system.
- 13. Explain the **sol-gel theory** of amoeboid locomotion.
- 14. Describe the process of **longitudinal binary fission in Euglena**.
- 15. Describe the **mutualism** with two examples.
- 16. Explain the economic importance of honey bees?
- 17. Draw a neat labelled diagram of the mouth parts of female mosquito.
- 18. How do natality, mortality and population dispersal affect the density of a population.

SECTION-C

III. Long answer questions

Answer any two of the following questions. Each answer may be limited to 60 lines

- 19. Describe the mosquito phase of *Plasmodium vivax*.
- 20. Explain blood circulation in *Pheretima* in the first thirteen segments with a suitable diagram.
- 21. What is a food chain? Explain the various types of food chains in a community. Add a note on food web.

 $2 \ge 8 = 16 M$

 $6 \times 4 = 24 M$

 $10 \ge 2 = 20$ M

Max. Marks: 60