

1[CCE.M]1

Zoology-I

(24)

Time : Three Hours

Maximum Marks : 300

INSTRUCTIONS

- (i) Answers must be written in English.
- (ii) The number of marks carried by each question is indicated at the end of the question.
- (iii) The answer to each question or part thereof should begin on a fresh page.
- (iv) Your answers should be precise and coherent.
- (v) The part/parts of the same question must be answered together and should not be interposed between answers to other questions.
- (vi) Candidates should attempt question nos. **1** and **5** which are compulsory and any **three** out of the remaining questions, selecting at least **one** question from each section.
- (vii) If you encounter any typographical error, please read it as it appears in the text book.
- (viii) Candidates are in their own interest advised to go through the General Instructions on the back side of the title page of the Answer Script for strict adherence.

- (ix) No continuation sheets shall be provided to any candidate under any circumstances.
- (x) Candidates shall put a cross (X) on blank pages of Answer Script.
- (xi) No blank page be left in between answer to various questions.

SECTION–A

1. Write notes on any **three** of the following :
 - (a) Asconoid and Syconoid Canal system in Porifera
 - (b) Affinities of Urochordata
 - (c) Parental care in Amphibia
 - (d) Biological significance of *Peripatus*. 25×3=75
2. Give an account of metamorphosis in insects. Discuss the role of hormones in metamorphosis. 50
3. Describe the life history of *Taenia solium* and its pathogenicity. Explain how is it adapted to parasitic mode of life ? 50
4. What are the features of aerial adaptations in birds ? Discuss the migration of birds with a note on its importance. 50

SECTION–B

5. Write notes on any **three** of the following :
 - (a) Induced breeding in fishes
 - (b) Biological clocks
 - (c) Hazards of air pollutants
 - (d) Energy flow through an ecosystem. 25×3=75

6. Explain pheromones and their different types. Discuss their role in animal behaviour. 50
7. (a) Describe the life history of *Pyrilla perpusilla* and the damage caused by it.
(b) Give the scientific names, systematic position and damage caused by major pests of stored grains and pulses. Discuss general control measures of these pests. 50
8. Discuss the major causes of wildlife depletion in India. Explain the objectives of conservation of wildlife and the strategies formulated for its achievement. 50