

1(CCE-M)4

**ZOOLOGY - I**

[24]

Time : 3 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 answer 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 more out of the remaining questions, selecting at least one 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.

xii) No programmable calculator is allowed.

xiii) No stencil (With different markings) is allowed.

## SECTION-A

1. Write notes on any three of the following:

(20+20+20=60)

- a) Polymorphism in hydrozoa
- b) Poison apparatus of snakes
- c) Mammal-like reptiles of Triassic period
- d) Aristotle's Lantern

2. Describe the locomotion and respiratory mechanism in fishes.

60

3. What is metamericism? Describe its importance in invertebrates.

60

4. Describe the origin of birds. Also compare archaeopteryx and modern-day crow (*Corvus*) in terms of similarities.

60

## SECTION-B

5. Write notes on any three of the following:

20+20+20=60

- a) Legal frameworks for wildlife conservation in India
- b) Ecological pyramids
- c) Bee culture and sericulture
- d) Nitrogen cycle

6. Describe the neuro-endocrine control of behaviour in animals.

60

7. What is commensalism? Describe host parasite relationships with suitable examples.

60

8. Describe types, sources and impact of air pollutants in environment.

60



1.45 Century