

1(CCE-M)4

ZOOLOGY - II

[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 five question
Q No: 1 and 5 are compulsory
- 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.

60

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) Hardy-Weinberg law.
 - b) Normal and abnormal karyotypes
 - c) Watson-Crick model of DNA
 - d) Mitochondria as "powerhouse of the cell"
2. Describe the structure and function of plasma membrane and endoplasmic reticulum. 60
3. Explain mimicry and its significance in the life of an animal with suitable example. 60

4. Give a detail account of prokaryotic translation initiation complex. 60

SECTION-B

5. Write notes on any three of the following: 20+20+20=60

- a) Extra embryonic membranes in chicks
- b) Oogenesis in a mammal
- c) Types and functions of Immunoglobulins
- d) Metamorphosis in frog

6. Explain the ultra structure and mechanism of contraction of skeletal muscles. 60

7. Describe the types and functions of placenta in mammals. 60

8. Give an account of classification biosynthesis and functions of hormones. 60

