

ZOOLOGY (Paper I)

Time Allowed : Three Hours

Maximum Marks : 300

QUESTION PAPER SPECIFIC INSTRUCTIONS

(Please read each of the following instructions carefully before attempting questions)

There are EIGHT questions divided in two Sections.

Candidate has to attempt FIVE questions in all.

Question Nos. 1 and 5 are compulsory and out of the remaining, any THREE are to be attempted choosing at least ONE question from each Section.

The number of marks carried by a question/part is indicated against it.

Wherever any assumptions are made for answering a question, they must be clearly indicated.

Word limit in questions, wherever specified, should be adhered to.

SECTION 'A'

1. Write concise account of any three of the following in about 200 words each: **20×3=60**
- (a) Various types of symmetry found in animal kingdom, with suitable examples.
 - (b) Comparison of alimentary canal of frog and rabbit
 - (c) Torsion in gastropoda
 - (d) Structure and function of thyroid gland along with its regulation.
2. Explain the status of Protista and parazoa giving their characteristics with suitable example. **60**
3. Explain the metamorphosis in insects and its hormonal regulation. **60**
4. Draw well labeled diagram of transverse section of mammalian testis and ovary. Describe the function of Male and female sex hormones (Testosterone and estrogen) **60**

SECTION 'B'

5. Write brief account of any three of the following in about 200 words each: **20×3=60**
- (a) What is ecological succession? Describe its process in a pond or lake.
 - (b) Concept of imprinting
 - (c) Malaria: its vector, pathogen and prevention
 - (d) Chi-Square and its importance
6. What is pollution? Describe water pollution, its sources and prevention. **60**
7. What is sericulture? Describe the tools and materials required for it. Mention different types of silk moth and varieties of silk common in India. **60**
8. (a) What is mean, median and mode? Explain the relationship between these three measures of central tendency. **30**
- (b) what is electron microscopy? Mention different types of electron microscopes and their use in biology. **30**