

CSM – 70/18
Zoology
Paper – I

Time : 3 hours

Full Marks : 300

The figures in the right-hand margin indicate marks.

Candidates should attempt Q. No. 1 from Section – A and Q. No. 5 from Section – B which are compulsory and three of the remaining questions, selecting at least one from each Section.

SECTION – A

1. Write a brief account on any three of the following in about 200 words each : $20 \times 3 = 60$
- (a) State the characteristics features of the Phylum Arthropoda. Classify Phylum Arthropoda with salient features up to order. Give examples.
- (b) Write a note on conjugation in *Paramecium* sp. with neat diagram. State its significance.

- (c) Comment on retrogressive metamorphosis in **Ascidia**.
- (d) Migration of Fish
2. Describe the life history of **Plasmodium vivax** with neat diagram. Give a comparative account on four species of **Plasmodium**. 60
3. State the larval forms of Echinodermata with diagram. Comment on its phylogenetic significance. 60
4. Give a comparative account on brain in vertebrates. 60

SECTION - B

5. Write a brief account on any **three** of the following in about **200** words each : $20 \times 3 = 60$
- (a) Write a note on Pollution of Air
- (b) Wild life in Odisha
- (c) Types and Mechanism of Learning
- (d) Impact of Pebrine in Sericulture
6. Write a note on scope of prawn culture on India. 60

7. Write about biogeochemical cycle of Nitrogen and Carbon. 60
8. (a) Basic principles and applications of Transmission electron microscopy. 30
- (b) Methods of sampling 30



