

ZOOLOGY PAPER-II

[Bio-diversity and Cell Biology-II (ZOO-102)]

Time Allowed : Three Hours

Maximum Marks : 36

- Note : (i) Attempt *five* questions in all.
(ii) Question No. 1 is compulsory.
(iii) Select *one* question from each Unit.
(iv) Illustrate your answer with suitable diagrams.

1. Define/Give brief explanation of the following :

- (a) Plasmid
- (b) Parenchyma
- (c) Intestinal caeca
- (d) Heterochromatin
- (e) Pseudocoel
- (f) Active immunity
- (g) Chlorogogen cell
- (h) Onchosphere

1×8=8

Unit-I

- 2. Explain the life-history of Liverfluke. 7
- 3. (a) Describe the morphological adaptations of Helminthes parasite. 4
- (b) Write a note on Papillae of Ascaris. 3

Unit-II

- 4. Describe the Reproductive system of earthworm. 7
- 5. (a) Write a note on septal Nephridium. 3
- (b) Classify upto order with ecological not and economic importance (if any) of the following :
 - (i) Chaetopterus
 - (ii) Pontobdella 4

Unit-III

6. (a) Explain polymorphism in lysosome.
(b) Discuss its functions.
7. (a) Why Ribosomes are called protein factories ?
(b) Describe structure of centriole.
(c) Write a note on sex chromosome.

Unit-IV

8. (a) Explain the structure of nucleolus.
(b) What are the functions of nucleus ?
9. Differentiate between the following :
 - (a) Benign tumor and malignant tumor
 - (b) Antigen and antibody
 - (c) B-cell and T-cell