

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. Give /Define brief explanations of the following :

- (a) Scolex
- (b) Mehli's gland
- (c) Protandry
- (d) Heterochromatin
- (e) Pineal spicule
- (f) Hexacanth
- (g) Gravid Proglottid
- (h) Benign Tumour

1×8=

Unit-I

2. Give a detailed account of Life History of Fasciola.
3. (a) Describe the morphological adaptations of Helminthes.
(b) Explain the sense organs of Ascaris.

3½,3

Unit-II

4. Explain the different types of Nephridia of Pheretima. 7
5. (a) Draw well labelled diagram of T.S. Pheretima through Typhlosolar region. 4
- (b) Classify upto order with ecological note and economic importance (if any) of any *two* of the following :
- (i) Eunice
 - (ii) Tubifex
 - (iii) Pontobdella
- 1½ each

Unit-III

6. (a) Explain Polymorphism in Lysosome. 5
- (b) What is the role of Autolysis ? 2
7. (a) Differentiate between Prokaryotic and Eukaryotic Ribosomes. 4
- (b) Write a note on centriolar satellite complex. 3

Unit-IV

8. (a) Describe the structure and functions of Nucleolus. 4
- (b) Explain the types of Cancer. 3
9. (a) Differentiate between B cells and T cells. 4
- (b) How do the B cells respond to Antigens ? 3