

## ZOOLOGY

**Paper I : Biodiversity Chordates & Evolution-I (ZOO-301)**

**Time Allowed : Three Hours**

**Maximum Marks : 36**

**Note :** Attempt five questions in all, at least one from each Unit. Question No. 1 is compulsory. Draw neat and well-labelled diagrams wherever required.

1. (a) Reducing atmosphere
- (b) Genetic drift
- (c) Missing link

- (d) Test
- (e) Wheel organ
- (f) Anadromous fish migration
- (g) Heterocercal tail fin
- (h) Hibernation

8 × 1 = 8

**UNIT-I**

- 2. Explain Darwinism. 7
- 3. (a) Describe the analogous organs.
- (b) Give the experiment given by Miller and Urey for the synthesis of organic compounds. 4,3

**UNIT-II**

- 4. (a) Describe the digestive system of *Hardmania*. 5,2
- (b) What do you mean by parental care? Give examples.
- 5. (a) Give an account of pharyngeal region of *Branchistoma*.
- (b) Write a note on nephridium of *Branchiostoma*.
- (c) Give the classification and habits of *Molgula*. 4,2,1

**UNIT-III**

- 6. (a) Describe the urinogenital system of *Labeo*. 5,2
- (b) Write a note on gill of *Labeo*.
- 7. (a) Explain the affinities of *Cyclostomata*.
- (b) Write a note on placoid scater of Fish.
- (c) Give the habits and economic importance of *Chimaera*. 4,2,1

**UNIT-IV**

- 8. (a) Describe the reproductive system of frog. 5,2
- (b) Give a brief account of heart of frog.
- 9. (a) Explain the structure of ear in frog.
- (b) Write a note on spinal cord.
- (c) Give the classification and characters of *Amphioxus*. 4,2,1