

2121

B.A./B.Sc. (General) Third Semester

Zoology

ZOO-301: Biodiversity (Chordates) and Evolution – I

Time allowed: 3 Hours

Max. Marks: 36

NOTE: Attempt five questions in all, including Question No. I which is compulsory and selecting one question from each Unit.

x-x-x

I. Answer the following:-

- a) Differentiate atrium from coelom.
- b) What is the position and function of endostyle?
- c) Justify the subphylum Urochordata for *Herdmania*.
- d) What is venous heart?
- e) Define coacervates.
- f) Explain position and function of Bidder's canal.
- g) What is convergent evolution?
- h) Differentiate feeding habit of *Branchiostoma* from *Petromyzon*. (8x1)

UNIT - I

- II. Explain circulatory system of *Herdmania*. (7)
- III. Explain the digestive system of *Branchiostoma*. (7)

UNIT - II

- IV.
 - a) Explain the breathing mechanism in *Labeo*.
 - b) Explain the cranial nerves in *Labeo*. (3,4)
- V. Classify and write a brief ecological note on the following: -
 - a) Protopterus
 - b) Myxine
 - c) Chimaera (7)

P.T.O.

(2)

UNIT - III

VI. Write a note on the following:-

- a) Female reproductive system of frog
- b) Ear of frog

(7)

VII. Classify and write a brief ecological note on the following:-

- a) Axolotl Larva
- b) Necturus
- c) Hyla

(7)

UNIT - IV

VIII. Discuss various types of evidences of organic evolution.

(7)

IX. Write a note on the following:-

- a) Darwinism
- b) Biogenesis

(7)

x-x-x