

B.Sc. ZOOLOGY THIRD SEMESTER SESSIONAL EXAMINATION, 2023
DIVERSITY OF CHORDATES
PAPER CODE: ZOO-HC-3016

Marks=30

Time=1 hour

1. Choose the correct answer (any five)

1×5=5

a. Which of the following is not a chordate character

- (i). A dorsal hollow tubular nerve cord
- (ii). A rod like notochord
- (iii). A series of pharyngeal gill slits
- (iv). Diploblastic.

b. Free swimming tornaria larva is formed during embryonic development of

- (i). Urochordata
- (ii). Craniata
- (iii). Hemichordata
- (iv). Cephalochordates.

c. In Lampreys paired appendages are

- (i). 2 pairs
- (ii). 3 pairs
- (iii). 4 pairs
- (iv). Absent

d. In amphibians respiration takes place by

- (i). Gills, lungs, skin and buccal lining
- (ii). Gills and lungs
- (iii). Skin and gills
- (iv). Gills, lungs and buccal lining.

e. Caecilians belong to order

- (i). Urodela
- (ii). Gymphiona
- (iii). Anura
- (iv). Ophisthocoela.

f. Heart in crocodiles is

- (i). Completely 4 chambered
- (ii). Incompletely 4 chambered

(iii). 3 chambered

(iv). 2 chambered.

2. Answer the following questions in brief (any five):

2×5=10

- a. What is neoteny?
- b. State two distinguishing characters of Agnathostomata.
- c. What do you understand by ectotherms?
- d. What is a living fossil?
- e. What do you understand by 'parental care' in vertebrates?
- f. What is retrogressive metamorphosis?

3. Write short notes on (any one):

5×1=5

- a. Dipleurula concept of origin of chordates
- b. Biting mechanism in snakes
- c. Advanced features of vertebrates over protochordates.

4. Answer any one of the following:

10×1=10

- a. Write the general characters of cyclostomata and their classification upto order.
- b. Discuss the affinities of Sphenodon.
- c. Write in brief about parental care in Amphibia.
- d. Elucidate the phenomena of metamorphosis by taking an Ascidian as example.