456/Zool 22-23 / 32611

B.Sc. Semester-III Examination, 2022-23 ZOOLOGY [Honours]

Course ID: 32611 Course Code: SH/ZOO/301/C-5

Course Title: Diversity of Chordata

Time: 1 Hour 15 Minutes Full Marks: 25

The figures in the right-hand margin indicate marks.

Candidates are required to give their answers in their own words as far as practicable.

UNIT-I

1. Answer any **five** of the following questions:

 $1\times5=5$

- a) Why endostyle of Urochordata is compared with mammalian thyroid gland?
- b) What is Wallace line?
- c) Why the fibres of Rhinoceros horn are not true horn?
- d) What do you mean by Aspect Ratio?
- e) Differentiate between cloaca and urethra.
- f) Write the role of melon in echolocation of cetaceans.
- g) Why Vagus nerve is called Wandering nerve?
- h) Define Aqueduct of Sylvius.

UNIT-II

2. Answer any **two** of the following questions:

 $5 \times 2 = 10$

- a) Write down the retrogressive changes in Ascidian metamorphosis. Why the metamorphosis of *Ascidia* is known as retrogressive metamorphosis?

 3+2=5
- b) Explain Dipleura concept of origin of chordates.
 Write a note on Plate tectonic movement.

3+2=5

- c) What are the differences between Physoclistous and Physostomous type of swim bladder? State the origin and function of air sac in *Channa*. What is Mermaid's Purse? 2+2+1=5
- d) Describe the different types of accessory respiratory organs in fishes with diagram. 3+2=5

UNIT-III

3. Answer any **one** of the following questions:

 $10 \times 1 = 10$

a) Classify class Reptilia up to living order with characteristic features and examples. Write a note on the parental care of *Ichthyophis*. 8+2=10

- b) Write short notes on (any **two**): $5 \times 2 = 10$
 - i) Exoskeleton of birds
 - ii) Poison apparatus in snakes
 - iii) Mega-Chiroptera and Micro-Chiroptera
 - iv) Echolocation in Bat.
