

# UNDERGRADUATE SEMESTER-III EXAMINATIONS, 2021

Subject: ZOOLOGY

Course ID : 32611

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

Course Title: Diversity of Chordata

Full Marks: 25

Time: 1 Hr 15 Min

The figures in the right side margin indicate full marks.  
Candidates are required to give their answers in their own words as far as practicable.

## UNIT-1

1. Answer any five of the following:

1x5=5

(a) Heterocercal tail of Elasmobranchs is considered as analogous to swim bladder of bony fish – why?

(b) Lobed fin fishes are considered as evolutionary predecessors of tetrapods – Give one reason for such consideration.

(c) Name the bones constituting the Weberian ossicle.

(d) Why solenoglyphous fangs are so-called?

(e) Write down the composition of Buffalo horn?

(f) Differentiate between ceruminous and sweat gland.

(g) Migration is known common to both fishes and birds. What are the principal objectives for their migration?

(h) Echolocation in Cetaceans differs to the echolocation of bats in their echolocation organs and media through which the process occurs. Write down the chief organs involved in echolocation of both?

## UNIT-2

2. Answer any two of the following:

5x2=10

(a) Justify the inclusion of Monotremata under Class-Mammalia. Write down geographical distribution of monotremes. (4+1)

(b) What do you mean by angle of attack? What happens when the angle of attack is increased? How does a bird solve this problem while in flight? (1+2+2)

(c) Briefly explain the Continental Drift theory in the light of Vertebrate distribution on the earth. (5)

(d) Draw and describe the structure of pharynx in *Branchiostoma*. Write down the role of pharynx in feeding? (2+2+1)

## UNIT-3

3. Answer any one of the following:

10x1=10

(a) Classify Amphibia up to living order with examples as per classification rule. Write down the role of iodine in Amphibian metamorphosis? (8+2)

(b) What are the components of poison apparatus in snakes? Describe the mechanism of biting? Mention the differences in action of a Viper and Cobra poison if any? (3+5+1+1)