



বিদ্যাসাগর বিশ্ববিদ্যালয়
VIDYASAGAR UNIVERSITY
Question Paper

B.Sc. Honours Examinations 2021

(Under CBCS Pattern)

Semester - III

Subject : ZOOLOGY

Paper : C 5 - T & P

(Chordates)

Full Marks : 60 (Theory-40 + Practical-20)

Time : 3 Hours

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

The figures in the margin indicate full marks.

(Theory)

Group-A

Answer any **three** questions from the following :

12×3=36

1. (a) Write down the chordate characters of Amphioxus.
- (b) What is migration ? Describe the different types of migrations of fish with examples.
- (c) Write a short note on : Swim bladder in fishes. 3+2+4+3
2. (a) Describe the parental care in fishes.
- (b) What is retrogressive metamorphosis? How Ascidia retrograde itself ?

6+2+4

3. (a) Illustrate the biting mechanism of snake ?
(b) Describe the aerodynamics flight of bird. 6+6
4. (a) Classify the Sub-phylum Urochordata upto classes with characters and proper examples.
(b) Write down the two important similarities between eutherian and Prototherian mammals. 8+4
5. (a) What is zoogeographical realm? Describe different types of such realms.
(b) State the affinities between Echinodermata and Chordata.
(c) Add a note on the larval diversity in Echinodermata. 6(2+4)+3+3
6. (a) Classify the Class Amphibia upto living order with characters and proper example.
(b) Explain the taxonomic significance of Balanoglossus in respect of evolution of chordates. 8+4

Group-B

Answer any *two* questions from the following : 2×2=4

1. Write the advantages of accessory respiratory organs in fishes?
2. What is echolocation ? Give example.
3. 'All vertebrates are chordates but all chordates are not vertebrates'—justify this statement.
4. What is adaptive radiation ?

(Practical)
Paper - C-5P
(Chordates)
Marks : 20

Group-A

Answer any **one** question from the following : 15×1=15

1. Write down the identifying characters of the following questions any **three** : 5×3=15

(a) *Balanoglossus*

(b) *Hippocampus*

(c) *Myxine*

(d) *Axolotol*

2. With a labelled diagram show the different parts of the dissected brain and pituitary of any fish sample. 8+7

3. Comment on different structural components of endostyle, labyrinth organ and swim bladder of fish 5+5+5

Group-B

Answer any **one** question from the following : 5×1=5

1. Write about the significance of submission of laboratory note book and viva-voce in the subject chordates. 5

2. Comment on the roles of Avifauna as the biomanipulator of both aquatic and terrestrial ecosystems. 5

3. Comment on the roles of exotic species of fish in the freshwater ecosystem. 5
