

2023

( FYUGP )

( 3rd Semester )

ZOOLOGY

( Minor )

Paper Code : ZOO/M-3

( Diversity of Chordates )

Full Marks : 75

Pass Marks : 40%

Time : 3 hours

( PART : B—DESCRIPTIVE )

( Marks : 50 )

*The figures in the margin indicate full marks for the questions*

1. What are Chordates? Describe the general characteristics of Chordates. 2+8=10

Or

What is Urochordate? Give a detailed account on general characteristics of urochordate. 2+8=10

2. Explain the Echinoderm theory of origin of Chordates. 10

Or

Discuss the classification of cyclostomes up to class.

3. Describe in detail the parental care in fishes. 10

Or

Explain parental care in amphibians.

4. Describe in detail the affinities of Sphenodon. 10

Or

Explain the migration in birds in detail.

5. Write a detailed note on affinities of Prototheria. 10

Or

Elaborate the general characteristics of mammals.

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**ZOOLOGY**

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Paper Code : ZOO/M-3

( **Diversity of Chordates** )

( PART : A—OBJECTIVE )

( Marks : 25 )

*The figures in the margin indicate full marks for the questions*

SECTION—I

( Marks : 15 )

Put a Tick (✓) mark against the correct answer in the brackets provided : 1×15=15

1. Enterocoelous coelom is found in

(a) Hemi-chordata ( )

(b) Urochordata ( )

(c) Cephalochordata ( )

(d) Both (a) and (c) ( )

2. Retrogressive metamorphosis is found in

- (a) Cephalochordata ( )
- (b) Hemi-chordata ( )
- (c) Urochordata ( )
- (d) None of the above ( )

3. No special respiratory organ is present in

- (a) Hemi-chordata ( )
- (b) Cephalochordata ( )
- (c) Urochordata ( )
- (d) None of the above ( )

4. The term Dipleurula was coined by

- (a) Semon ( )
- (b) Bather ( )
- (c) Johannes Muller ( )
- (d) None of the above ( )

5. One of the advanced features of vertebrates over protochordata is

- (a) lacking a head ( )
- (b) heart divided into chambers ( )
- (c) lacking a cranium ( )
- (d) None of the above ( )

6. One of the characters found in Agnatha is

- (a) paired appendage ( )
- (b) inner ear with 3-semi circular canals ( )
- (c) lacking true jaws ( )
- (d) None of the above ( )

7. Amphidromous migration is exhibited by

- (a) Chanos ( )
- (b) Anguilla ( )
- (c) Salmon ( )
- (d) None of the above ( )

8. The order Apoda included

(a) Anguilla ( )

(b) Catfish ( )

(c) Salmon ( )

(d) None of the above ( )

9. Hyla is included in the sub-class

(a) Stegocephalia ( )

(b) Salientia ( )

(c) Gymnophiona ( )

(d) None of the above ( )

10. Gecko is included in the order

(a) Chelonia ( )

(b) Squamata ( )

(c) Rhynchocephalia ( )

(d) None of the above ( )

11. Snakes can swallow bigger animals as a whole due to

- (a) presence of pectoral girdle ( )
- (b) sternum ( )
- (c) loosely attached lower jaw ( )
- (d) None of the above ( )

12. One of the reptilian characters of Archaeopteryx is

- (a) poorly developed sternum ( )
- (b) pneumatic bone ( )
- (c) fused carpo-metacarpus ( )
- (d) None of the above ( )

13. The animal included in the order primate is

- (a) Armadillo ( )
- (b) Lemur ( )
- (c) Manis (ant-eater) ( )
- (d) None of the above ( )

14. Prototheria has reptilian character of

(a) segmented sternum ( )

(b) pinnae ( )

(c) cloaca ( )

(d) None of the above ( )

15. India is included in the zoogeographical realm of

(a) oriental realm ( )

(b) neotropical realm ( )

(c) palearctic realm ( )

(d) None of the above ( )



( 7 )

SECTION—B

( Marks : 10 )

Write short notes on any *five* of the following :  $2 \times 5 = 10$

1. Hemichordata

2. Protochordata

SECTION - B

( Marks : 10 )

Q1. x3-10

Write short notes on any four of the following:

1. Hemichordata

(a) Thaliaceae

(b) Salpidae

(c) Appendicularia

Q2. Which of the following is included in the phylum Chordata?

(a) Appendicularia

(b) Neotropical region

(c) Pleistocene region

(d) None of the above

3. Chondrichthyes

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4. Reptilia

5. Poison apparatus

Adapted from [illegible]

6. Adaptive radiation

5. PAPER 4000000000

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