

**2024/FYUG/ODD/SEM/  
ZOODSC-102T/063**

**FYUG Odd Semester Exam., 2024**

**ZOOLOGY  
( 1st Semester )**

Course No. : ZOODSC-102T

**( Diversity of Chordates )**

Full Marks : 70

Pass Marks : 28

Time : 3 hours

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

**UNIT—I**

1. Answer any *two* from the following :  $2 \times 2 = 4$

- (a) Differentiate between taxonomy and systematics.
- (b) Note down the importance of classification in taxonomy.
- (c) Who discovered the DNA barcoding?  
What is the significance of DNA Barcoding?

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( Turn Over )

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2. Answer any one from the following : 10

- (a) What is taxonomic hierarchy? Discuss in detail the Linnaean hierarchy you have studied. 2+8=10
- (b) Briefly discuss the concept of molecular taxonomy and DNA barcoding. 4+6=10

#### UNIT—II

3. Answer any two from the following : 2×2=4

- (a) Note down the difference between vertebrate and protochordate.
- (b) Mention at least four characteristics of urochordata.
- (c) Write down four distinguishing characters of chordata.

4. Answer any one from the following : 10

- (a) What do you mean by retrogressive metamorphosis? Describe the retrogressive metamorphosis in urochordata. 2+8=10
- (b) Write a note on subphylum of chordata mentioning their distinguishing characteristics along with example.

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#### UNIT—III

5. Answer any two from the following : 2×2=4

- (a) Define potamodromous migration with example.
- (b) Write down the morphological characters of the family Cyprinidae.
- (c) Differentiate between chondrichthyes and osteichthyes.

6. Answer any one from the following : 10

- (a) What do you mean by parental care? Discuss in detail the parental care in fishes with example. 2+8=10
- (b) Describe in detail the different types of migration as found in fishes. Add a note on osmoregulation in marine fishes. 6+4=10

#### UNIT—IV

7. Answer any two from the following : 2×2=4

- (a) Write at least four characteristics of class Caecilians.
- (b) Note down the characteristic feature of sphenodon.
- (c) Mention the types of fangs.

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8. Answer any *one* from the following : 10

(a) State the difference between poisonous and non-poisonous snakes. Write a note on biting mechanism of snakes with suitable diagrams. 4+6=10

(b) Discuss why is sphenodon termed as 'living fossil'. Write a detailed note on affinities of sphenodon. 3+7=10

### UNIT—V

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

(a) Note down the characters of chiroptera with example.

(b) Why is ornithorhynchus considered an unfinished mammal?

(c) Write a note on echolocation in bats.

10. Answer any *one* from the following : 10

(a) What is hyperphagia? Mention its significance. Write an essay on perching mechanism in birds with suitable diagram. 2+2+6=10

(b) Classify mammal up to order with suitable example. Add a note on the general character of mammal. 6+4=10

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