

**S.C.I.M. Govt. College (Autonomous), Tanuku, W.G**

**B.Sc. –ZOOLOGY (W.E.F 2024-25 Batch)**

**Semester-III (Minor)**

**MODEL QUESTION PAPER**

**Course-II: Animal Diversity-II Biology of Chordates**

**Time: 3 Hours**

**Maximum: 60 Marks**

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**SECTION – A**

**Answer any FIVE questions. Each question carries 4 marks**

**(5 X 4 = 20M)**

1. Write salient features of Cephalochordates.
2. Compare the characteristics of Petromyzon and Myxine.
3. Write an account of Dipnoi fishes.
4. Draw & describe placoid and ctenoid scales
5. Describe the external features of Calotes.
6. Summarize the types of migration in birds?
7. Describe the general characters of Mammalia?
8. Explain the aquatic adaptations of mammals.

**SECTION – B**

**Answer all the questions. Each question carries 08 marks.**

**(5 X 8 = 40M)**

9. a). Classify the sub-phylum Vertebrata up to classes with suitable examples.  
(OR)  
b). Justify how the life history of Herdmania demonstrates retrogressive metamorphosis.
10. a) Describe the digestive system in Scoliodon with a neat labelled diagram  
(OR)  
b). Describe the structure and functions of the Brain in Scoliodon
11. a). Describe the structure and functions of heart in Rana hexadactyla.  
(OR)  
b). Differentiate between poisonous and non-poisonous snakes.
12. a). Draw & describe the respiratory system in Columba livia  
(OR)  
b). Analyze the flight adaptations in birds.
13. a). Classify the class Mammalia up to sub - classes with examples  
(OR)  
b). Describe the dentition in mammals.

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**B.Sc. –ZOOLOGY (W.E.F 2024-25 Batch)**  
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**Course-II: Animal Diversity-II Biology of Chordates**  
**QUESTION BANK**

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**ESSAY QUESTIONS (10 Marks)**

**Draw neat, labelled diagrams wherever necessary.**

**UNIT-1**

1. Describe the general characters of Chordata and classify Chordata up to classes
2. Justify how the life history of Herdmania demonstrates retrogressive metamorphosis.
3. Compare the characteristics of Petromyzon and Myxine.

**UNIT-2**

1. Write an essay on the general characters of Fishes.
2. Describe the digestive system in Scoliodon with a neat labelled diagram
3. Describe the structure and functions of the Brain in Scoliodon

**UNIT-3**

1. Describe the Respiratory system in Rana hexadactyla.
2. Describe the structure and functions of heart in Rana hexadactyla.
3. Describe the structure and function of Brain in Rana hexadactyla.
4. Differentiate between poisonous and non-poisonous snakes.

**UNIT-4**

1. Draw & describe the respiratory system in Columba livia
2. Draw & describe the Digestive system in Columba livia
3. Describe the types and modes of migration in Birds
4. Analyze the flight adaptations in birds.

**UNIT-5**

1. Classify the class Mammalia up to sub - classes with examples
2. Compare Prototherians, Metatherians and Eutherians
3. Describe the dentition in mammals.

## SHORT ANSWER QUESTIONS (4 Marks)

Draw diagrams wherever necessary

### UNIT-1

1. Describe the salient features of Cephalochordata
2. Describe the salient features of Urochordata
3. Describe the general Characters of Cyclostomata

### UNIT-2

1. Write an account of Dipnoi fishes.
2. Draw & describe placoid and ctenoid scales
3. Describe the external features of Scoliodon
4. Describe the Respiratory system in Scoliodon

### UNIT-3

1. Describe the general characters of Amphibia.
2. Draw a neat, labelled diagram of dorsal and ventral view of brain in *Rana hexadactyla*.
3. Describe the general characters of Reptilia.

### UNIT-4

1. Describe the general characters of Aves.
2. Describe the external features of *Columba livia*.

### UNIT-5

1. Describe the general characters of Mammalia
2. Analyze the Reptilian and Mammalian characters of Prototheria
3. Analyze the characters that serve as aquatic adaptations in aquatic mammals.

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