



Progressive Education Society's
Modern College of Arts, Science & Commerce Ganeshkhind, Pune 16
End Semester Examination: Nov/Dec.2023
Faculty: Science and Technology

Program: BScGen03

Semester: III

SET: C

Program (Specific): Zoology

Course Type: CC

Class: S.Y.B. Sc

Max. Marks: 35

Name of the Course: Animal Systematics and Diversity III

Course Code: 23-ZO-231

Time: 2Hrs

Paper: I

Instructions to the candidate:

- 1) *There are 4 sections in the question paper. Write each section on separate page.*
- 2) *All Sections are compulsory.*
- 3) *Figures to the right indicate full marks.*
- 4) *Draw a well labelled diagram wherever necessary.*

SECTION: A

Q.1 Define or Explain

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- a) Define Vertebrata.
- b) Define Homocercal tail.
- c) Define paedogenesis.
- d) Define placoid scales.
- e) Define viviparity.

Q.2 Attempt any four of the following

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- i. Give two example of Urochordata.
- ii. Name any two respiratory organs found in animals.
- iii. Explain type of teeth found in *Scoliodon*.
- iv. Name the ancestor of Chordates.
- v. Elaborate the term-CNS & PNS.
- vi. Give systematic position of *Scoliodon*.

SECTION: B

Q.3 Write note on any four of the following

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- a) Explain evolution of Chordates.
- b) Describe characteristics of subphylum Cephalochordata.
- c) Explain neoteny in class Amphibia.
- d) Describe food and feeding physiology in *Scoliodon*.
- e) Draw a well-labelled diagram of male urinogenital system in *Scoliodon*.
- f) Differentiate between Agnatha and Gnathostomata.

SECTION: C**Q.4 Attempt any four of the following****8**

- i. Describe parental care in order Anura.
- ii. Differentiate between chordates and non-chordates.
- iii. Explain outline classification of phylum Chordata.
- iv. Why *Petromyzon* is called jawless vertebrates?
- v. Describe sexual dimorphism in *Scoliodon*.
- vi. Write a note on respiratory adaptation in fishes.

SECTION: D**Q.5 Attempt any two of the following.****10**

- I. Explain structure of brain in *Scoliodon* with diagram.
- II. Describe classification of class Amphibia with one example each.
- III. Explain structure of holobranch with diagram.
- IV. Explain salient features of subphylum Vertebrata.