



**Progressive Education Society's
Modern College of Arts, Science & Commerce Ganeshkhind, Pune 16
End Semester Examination: April/May 2024
Faculty: Science and Technology**

Program: BScGen03**Semester: IV****SET: B****Program (Specific): Zoology****Course Type: CC****Class: S.Y.B. Sc****Max. Marks: 35****Name of the Course: Animal Systematics and Diversity IV****Credits: 2****Course Code: 23-ZO-241****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****5**

- a) Define viviparity.
- b) Explain the role of patagium.
- c) Define poikilotherms.
- d) Explain flightless birds.
- e) Define Class Aves with two examples.

Q.2 Attempt any four of the following**4**

- a) Describe any two habits of rat.
- b) Explain neurotoxic venom.
- c) State the function of blubber in whale.
- d) Define Diapsida.
- e) Explain plantigrade condition.
- f) State the function of brain in rat.

SECTION: B**Q.3 Write note on any four of the following****8**

- a) What is heterodont dentition?
- b) Describe migratory birds with suitable examples.
- c) Distinguish between venomous and non - venomous snakes.
- d) State the sexual dimorphism in rat.
- e) Give the systematic position of rat.
- f) Comment upon the environmental sex determination in reptiles.

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

- a) Give the systematic position of peacock.
- b) Describe marsupial mammals.
- c) Write a note on any four aquatic adaptations in mammals.
- d) Describe the anatomical flight adaptations in birds.
- e) State the functions of the respiratory system in rat.
- f) Describe the cursorial adaptations in mammals.

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

- a) Explain the Digestive system of rat with a suitable diagram.
- b) Describe the nesting pattern in birds.
- c) Describe the female reproductive system of rat with a suitable diagram.
- d) Comment upon the salient features of Class Mammalia.