



**Progressive Education Society's**  
**Modern College of Arts, Science & Commerce Ganeshkhind, Pune – 16**  
**(Autonomous)**  
**End Semester Examination: MAR / APR 2025**  
**Faculty: Science and Technology**

**Program: BScGen03**  
**Program (Specific): Zoology**  
**Class: T.Y. B.Sc**  
**Name of the Course: Evolutionary Biology**  
**Course Code: 24-ZO-366**  
**Paper: VI**

**Semester: VI**

**SET: A**  
**Course Type: DSEC**  
**Max.Marks: 35**  
**Time: 2Hr**

**Instructions to the candidate:**

- 1) *There are 5 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.*

**Q1) Define or Explain**

**5**

- a) Define evolution.
- b) Define paleontology.
- c) Define mutation.
- d) Explain isolation.
- e) Define speciation.

**Q2) Very short answer questions (Attempt any 4/6)**

**4**

- a) What is gene evolution?
- b) Define analogy.
- c) Define Mendelian population.
- d) What is ancient DNA?
- e) What is mass extinction?
- f) Explain zoogeography.

**Q3) Short answer questions (Attempt any 4/6)**

**8**

- a) Comment on Darwinism.
- b) Enlist the types of mutation.
- c) Explain allopatric speciation with a suitable example.
- d) Describe the concept of evolution.



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- e) Explain embryological evidences with suitable examples.
- f) Explain the types of extinction.

**Q4) Short answer questions (Attempt any 4/6)**

**8**

- a) Explain Lamarck theory with suitable examples.
- b) Describe the sources of variation.
- c) Comment on the molecular clock.
- d) Explain the modes of speciation.
- e) Describe the origin of eukaryotic cell.
- f) Explain connecting links with suitable examples.

**Q5) Long answer type Questions**

**10**

**Attempt any two of the following (2/4)**

- a) Explain Modern synthetic theory of evolution.
- b) Describe the pre-zygotic isolating mechanism with suitable examples.
- c) Explain the Oriental zoogeographical realm with reference to fauna.
- d) Elaborate the salient features of Cro-Magnon man.