

(041230102)

M.Sc. DEGREE EXAMINATION, NOVEMBER 2017

THIRD SEMESTER

Branch - ZOOLOGY

Paper I — ENVIRONMENTAL BIOLOGY AND EVOLUTION

Time : 3 Hours

Max. Marks : 70

**PART - A**

Answer any FIVE of the following.

(Marks : 5 × 4 marks = 20 marks)

1. Energy budget.
2. Grass lands.
3. EIA.
4. Biomagnification.
5. Darwinism.
6. Allopatric speciation.
7. Natural selection.
8. Phylogeny.

**PART - B**

Answer FOUR of the following. Answer ONE question from each unit.

(Marks : 4 × 12.5 marks = 50 marks)

**UNIT - I**

9. Write an account on the classification and characteristics of different zones in freshwater environments.

Or

10. Describe in detail the biological magnification of chemical contaminants in aquatic ecosystems.

**UNIT - II**

11. What do you mean by biomonitoring. Explain the biomonitoring programmes.

Or

12. Explain the role of environmental epidemiological studies. Add a note on epidemiological episodes in India and abroad.

[P.T.O]

UNIT - III

13. Write an account on the theory of Neo-Darwinism.

Or

14. Explain the role of isolating mechanisms in organic evolution.

UNIT - IV

15. Give a detailed account on destabilizing forces in the process of evolution.

Or

16. Describe various micro and macro forces during the course of evolution.