

B.A./B.Sc. Semester—II

ZOOLOGY

Paper—Zoo-II A

(Ecology)

Time Allowed—3 Hours] [Maximum Marks—35

Note :— (1) Total *five* questions are to be attempted.
Q. 1 is compulsory.

(2) *Four* questions are to be attempted, selecting *one* question from each Section. All questions carry equal marks.

(3) Illustrate your answers with suitable diagrams wherever necessary.

1. Explain in 2-3 lines each :

- (i) Ecotone
- (ii) Biogeochemical cycle
- (iii) Autecology
- (iv) Xerocoles
- (v) Ecological pyramid
- (vi) Environmental monitoring
- (vii) Dispersion.

SECTION—I

- 2. Explain the basic concepts of Ecology.
- 3. What do you understand by ecosystem energetics ? Describe the energy flow in a typical ecosystem.

SECTION—II

- 4. (a) Describe the combined concept of limiting factors.
(b) Explain in detail the Liebig's law of minimum.
- 5. Giving suitable examples discuss the mechanism of ecological adaptations in Hydrophytes.

SECTION—III

- 6. Define a population. Give a brief account of various characteristics of a population.
- 7. Write short notes on :
 - (a) Ecological succession
 - (b) Ecological niche.

SECTION—IV

- 8. Write explanatory notes on the following :
 - (a) Depletion of energy resources
 - (b) Biofuels.
- 9. Give an account of sources and pollutants of water pollution and describe suitable measures to check water pollution.