

Exam. Code : 103202

Subject Code : 1340

B.A./B.Sc. 2<sup>nd</sup> Semester

ZOOLOGY ZOO-II A

(Ecology)

Time Allowed—Three Hours] [Maximum Marks—35

Note :—(1) Question No. 1 is compulsory.

(2) **FOUR** questions (long answer) are to be attempted, selecting **ONE** question from each of the **FOUR** units. Each question carries equal marks.

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

**SECTION—A**

1. Explain in 2-3 lines :

(i) Ecological hierarchy

(ii) Biotic community

(iii) Ecological pyramids

(iv) Ecosphere

- (v) Symbiosis
- (vi) Population dynamics
- (vii) Environmental resistance.

## SECTION—B

### UNIT—I

- 2. (a) Differentiate between habitat and niche.
- (b) What is the difference between heat and temperature ?
- 3. Give a diagrammatic representation of food web; explain the various food chains in a food web.

### UNIT—II

- 4. Write short notes on :
  - (a) Ecological adaptations in xerocoles
  - (b) Warning colourations.
- 5. Define biogeochemical cycles and explain how human activities could affect these cycles.

### UNIT—III

- 6. (a) List the characteristics of population.
- (b) Give a brief account of ecological succession.

7. How are the concepts of biotic potential, environmental resistance and carrying capacity related to population growth ?

#### UNIT—IV

8. Explain the importance of fresh water; the various uses of water and how it can be conserved.
9. Write explanatory notes on :
- (a) Alternative sources of energy
  - (b) Control of environmental pollution.