

2018

CBCS

1st Semester

ZOOLOGY

PAPER—C2T

(Honours)

Full Marks : 40

Time : 2 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Answer all questions

Ecology

1. Answer any *five* questions from the following : 5×2

(a) What do you mean by primary and secondary Succession ?

(b) What is sere ?

(c) State Gause's Principle.

- (d) What do you mean by species abundance and species richness.
- (e) Define in-situ conservation with examples.
- (f) Distinguish between habitat and niche.
- (g) Write the scientific name of two bacteria which are involved in nitrogen fixation.
- (h) How many trophic levels are there in a food chain ?

2. Answer any *four* questions :

4×5

(a) Define ecotone. Mention the characteristic features of an ecotone.

2 + 3

(b) Write a note on wildlife Protection Act (1972). 5

(c) What is the difference between in-situ and ex-situ conservation ? Discuss with examples. 3 + 2

(d) Define life table. Which data initiate the construction of a life table ? State the importance of life table. What do you mean by population explosion ? 1+1+2+1

(e) Explain α , β and γ diversity. Why some areas have more species diversity as compared to others ?

2 + 3

(f) Describe different types of ecological pyramids studied by you.

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3. Answer any *one* question :

1 × 10

(a) What is biogeochemical cycle ? Explain how nutrient cycle is regulated by the biogeochemical cycle.

2 + 8

(b) (i) Discuss the energy flow in an ecosystem through universal and Y shaped model.

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(ii) What do you mean by crude density and ecological density ?

2

(iii) What are biotic potential of carrying capacity ?

2