TDC Even Semester Exam., 2019

ECOLOGY AND ENVIRONMENTAL SCIENCE

(Pass)

(4th Semester)

Course No. : EESP–401

(Population and Community Ecology)

Full Marks : 35
Pass Marks : 12

Time : 2 hours

The figures in the margin indicate full marks for the questions

Answer **five** questions, selecting **one** from each Unit

UNIT—I

1. Define population growth. What are *J*- and *S*-shaped growth curves? Why are growth curves important in population attributes? 2+3+2=7

2. Write short notes on any *two* of the following : 3½×2=7

(a) Carrying capacity

(b) Survivorship curve

(c) Natality and mortality

UNIT—II

3. Discuss with examples biotic interactions of different types in a community. 7

4. Distinguish between the following : 3½×2=7

(a) Predator and Parasite

(b) Commensalism and Mutualism

UNIT—III

5. Write short notes on any *two* of the following : 3½×2=7

(a) Species diversity

(b) Population density

(c) Phenology

6. What are the characteristics of a community? How can you explain community structure? 4+3=7

UNIT—IV

7. Discuss in detail the methods of studying plant community in an ecosystem. 7

8. Write short notes on the following : 7

(a) Line transect method

(b) Plotless sampling method

UNIT—V

9. Write a note on ecological succession of a pond ecosystem with necessary examples and diagram. 7

10. Write notes on the following : 7

(a) Climax community

(b) Xerosere

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