TDC Even Semester Exam., 2019

BOTANY

(Honours)

(2nd Semester)

Course No. : BOTH–202

(Ecology and Phytogeography)

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. *(a)* What do you mean by the terms 'ecology' and 'ecosystem'? 1+1=2

(b) Differentiate between biotic and abiotic factors of an ecosystem with examples. 2

(c) Explain how all the biotic factors of an ecosystem are interconnected with each other. 3

2. *(a)* What is pneumatophore? Give examples. 1+1=2

(b) Describe different anatomical and physiological modifications adopted by plants to survive in high saline condition. 4

(c) What do you mean by physiologically dry soil? 1

UNIT—II

3. *(a)* Define population. Give a concise account of various characteristics of a population. 1+4=5

(b) Differentiate between natality and mortality. 2

4. Write notes on the following : 3½×2=7

(a) Carrying capacity

(b) Age pyramids

UNIT—III

5. *(a)* Define the following : 2×3=6

(i) Community

(ii) Stratification

(iii) Ecotone

(b) What do you mean by biome? 1

6. *(a)* What do you mean by species diversity? 3

(b) Describe the various features that characterize a community. 4

UNIT—IV

7. *(a)* Differentiate between food chain and food web. 2

(b) Describe the energy flow in a typical ecosystem. 5

8. *(a)* What do you mean by autogenic and allogenic successions? 1+1=2

(b) Give an account of the sequential stages of a typical hydrosere. 4

(c) What is ecesis? 1

UNIT—V

9. *(a)* Name the scientific names of two endemic plants of North-East India. 1+1=2

(b) Write the characteristic features of two floristic regions of India. 2½+2½=5

10. *(a)* What do you mean by plant distribution? 2

(b) Describe how various factors influence plant distribution. 2

(c) Write a note on endemism in India. 3

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