

(6 pages)

Reg. No. :

Code No. : 10536 E Sub. Code : CEBO 51

B.Sc. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2024.

Fifth Semester

Botany

Elective I – PLANT ECOLOGY AND
PHYTOGEOGRAPHY

(For those who joined in July 2021-2022 only)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. Identify a biotic factor from the following

- (a) Rainfall
- (b) Temperature
- (c) Light
- (d) Phytoplanktons

2. Which of the following is known as a topographic abiotic factor?

- (a) Earth's surface
- (b) Wind
- (c) Temperature
- (d) Humidity

3. Permafrost is associated with

- (a) Coral (b) Estuary
- (c) Tundra (d) Desert

4. Well-developed vascular tissue is an adaptation of

- (a) Xerophytes (b) Hydrophytes
- (c) Mesophytes (d) Psychrophytes

5. Who among the following has defined the units of vegetation?

- (a) Daubenmire (b) Clements
- (c) Odum (d) Raunkiaer

6. In quadrat study of ecosystem, frequency class is defined by

- (a) Transley (b) Odum
- (c) Leopold (d) Raunkiaer

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7. Which electronic device is used in biosensors?
- (a) Transmitter (b) Receptor
(c) Transducer (d) Electroyte
8. What are xenobiotics?
- (a) Another form of antibiotics
(b) A form of nutrient
(c) Nutrients while kill the gut harmful microbes
(d) Anything that is not nutrients and enters the body through different routes
9. Restricted distribution of flora and fauna is called
- (a) Epidemism (b) Endemism
(c) Euphemism (d) Pandemism
10. In Tamil Nadu, Shola forests are distributed in
- (a) Coimbatore district
(b) Theni district
(c) Thirunelveli district
(d) Nilgiris district

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PART B — (5 × 5 = 25 marks)

Answer ALL questions choosing either (a) or (b).
Each answer should not exceed 250 words.

11. (a) Describe the animals as an ecological factor.
- Or
- (b) Highlight the features of wind as an ecological factor.
12. (a) Explain the components of ecosystem.
- Or
- (b) Describe the anatomical adaptations of xerophytes.
13. (a) Explain the terms plant formation and association.
- Or
- (b) Comment on the term colonization.
14. (a) How will you account for biosensors?
- Or
- (b) Highlight the concept of biodegradation.

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[P.T.O.]



15. (a) Write down the types of endemism.

Or

- (b) Give an account of the vegetation types of Tamil nadu.

PART C — (5 × 8 = 40 marks)

Answer ALL questions choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Illustrate the Carbon cycle.

Or

- (b) Discuss the soil as an ecological factor.

17. (a) Write an essay on terrestrial ecosystems.

Or

- (b) Analyse the physiological adaptations of hydrophytes.

18. (a) Explain the community ecology.

Or

- (b) Write an essay on the development of vegetation.

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19. (a) Describe the process of *in situ* conservation.

Or

- (b) Explain the role of bioindicators in biomonitoring.

20. (a) Examine the principles of phytogeography.

Or

- (b) Analyse the climatic regions of India.

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