

(6 pages)

Reg. No. :

Code No. : 30533 E Sub. Code : CEBO 51

B.Sc. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2023.

Fifth Semester

Botany — Core

PLANT ECOLOGY AND PHYTOGEOGRAPHY

(For those who joined in July 2021–2022)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. Which among the following is an abiotic factor?

- (a) Phytoplanktons (b) Zooplanktons
(c) Benthos (d) Water

2. Which of the following is known as an edaphic factor?

- (a) Light (b) Soil
(c) Air (d) Water

3. The interaction between biotic factors and abiotic factors is called

- (a) Niche (b) Ecad
(c) Ecosystem (d) Habitat

4. Root pockets are found in

- (a) Halophytes (b) Xerophytes
(c) Psammophytes (d) Hydrophytes

5. Interbreeding individuals are called

- (a) Genera (b) Species
(c) Ecospecies (d) Coenospecies

6. In ecosystem development, ecesis refers to the

- (a) Movement of propagules
(b) Establishment of propagules
(c) Elimination of propagules
(d) Spreading of propagules

7. Lichens are good bioindicators for

- (a) Environmental radiation
(b) Soil pollution
(c) Water and air pollution
(d) Thermal pollution

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8. What is the unit of Specific Oxygen rate (SOUR)?
- (a) grams of oxygen consumed per gram of volatile suspended solids per hour
 - (b) milligrams of oxygen consumed per gram of volatile suspended solids per hour
 - (c) kilograms of oxygen consumed per gram of volatile suspended solids per second
 - (d) milligrams of oxygen consumed per gram of volatile suspended solids per second
9. Who among the following has proposed the Continental drift theory?
- (a) Wallace
 - (b) Darwin
 - (c) Wagner
 - (d) Theophrastus
10. Where is National Remote Sensing Agency situated?
- (a) Bengaluru
 - (b) Hyderabad
 - (c) Chennai
 - (d) Dehradun

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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) Give an account of plants as a biotic factor.
- Or
- (b) Explain fire as an ecological factor.
12. (a) List down the types of ecosystem.
- Or
- (b) Classify the plants based on ecology.
13. (a) Give an account of autecology.
- Or
- (b) Explain the concept of community.
14. (a) Bring out the features of xenobiotics.
- Or
- (b) List down the types of bioremediation.
15. (a) What do you mean by continental drift? Explain with example.
- Or
- (b) Explain the role of remote sensing in phytogeographical studies.

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PART C — (5 × 8 = 40 marks)

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

Each answer should not exceed 600 words.

16. (a) Draw the nitrogen cycle.

Or

- (b) Discuss the light as a climatic factor.

17. (a) Evaluate the morphological and anatomical adaptations of hydrophytes.

Or

- (b) Examine the physiological adaptations of xerophytes.

18. (a) Write an essay on units of vegetation.

Or

- (b) How will you study the vegetation using quadrat method?

19. (a) Critically examine the features of phytoremediation.

Or

- (b) Discuss, in detail, the role of bioindicators in environmental monitoring.

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20. (a) Write an essay on endemism.

Or

- (b) Critically review the vegetation types of Tamil Nadu.
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