

(6 pages)

Reg. No. :

Code No. : 20209 E Sub. Code : SEBO 6 A

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

Sixth Semester

Botany

Major Elective III – PLANT ECOLOGY AND
PHYTOGEOGRAPHY

(For those who joined in July 2017 – 2019)

Time : Three hours Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. The atmosphere contains _____% of nitrogen.
(a) 78 (b) 29
(c) 75 (d) 89
2. Which one of the following is a biotic factor?
(a) Plants (b) Animals
(c) (a) and (b) (d) Soil

3. The animals that consume the green plants are called
(a) Decomposers (b) Producers
(c) Consumers (d) Customers
4. The pyramid of energy is
(a) Always inverted
(b) Always upright
(c) Not a true pyramid
(d) Either upright or inverted
5. Only one dominant species characteristic to a particular area is called
(a) Association (b) Location
(c) Consociation (d) Plant formation
6. The study of the relationships of plants and animals in a natural habitat is called
(a) Association (b) Consociation
(c) Autecology (d) Synecology
7. The burning or combustion of wastes is called
(a) Landfill (b) Composting
(c) Bioremediation (d) Incineration

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8. The use of transgenic plants for environmental clean-up is called
(a) Phytoremediation (b) Biobleaching
(c) Biodegradation (d) Bioremediation
9. Which one of the following is used for the acquisition of information about far away objects?
(a) Radium (b) Auxanometer
(c) Rador (d) Colorimeter
10. The continental drift was first proposed by
(a) Watson (b) Crick
(c) Wegner (d) Chase

PART B — (5 × 5 = 25 marks)

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

Each answer should not exceed 250 words.

11. (a) Give a brief account on Carbon cycle.
Or
(b) Explain the role of microbes which influence the growth on Vegetation.

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12. (a) Describe energy flow in a forest ecosystem.
Or
(b) What are the morphological adaptations seen in hydrophytes? Explain with suitable examples.
13. (a) Describe the line transect method adopted to study plant community.

Or

- (b) Write short notes on Autecology.

14. (a) Give a brief account on phytoremediation.

Or

- (b) Write notes on Biobleaching.

15. (a) Give a brief account on Continental drift.

Or

- (b) List the different types of vegetations in Tamil Nadu.

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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) Give a detailed account on abiotic factors.

Or

- (b) Write an essay on Nitrogen cycle.

17. (a) Describe Aquatic ecosystem.

Or

- (b) Give a detailed account on various kinds of adaptations seen in xerophytes.

18. (a) Distinguish between association and consociation with examples.

Or

- (b) Describe the quadrat method adopted to study plant community.

19. (a) Write an essay on Biosensors.

Or

- (b) Write an essay on Bioremediation.

20. (a) Write an essay on principles of phytogeography.

Or

- (b) Write an essay on remote sensing.