

(6 pages)

Reg. No. :

Code No. : 30841 E Sub. Code : SEBO 6 A

B.Sc. (CBCS) DEGREE EXAMINATION, APRIL 2021.

Sixth Semester

Botany — Main

Major Elective — III

PLANT ECOLOGY AND PHYTOGEOGRAPHY

(For those who joined in July 2017 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer.

1. Which one of the following is an abiotic factor?
(a) Plants (b) Fungi
(c) Algae (d) Humus
2. The amount of carbon dioxide present in air is
(a) 0.03% (b) 0.05%
(c) 0.02% (d) 0.06%

3. The animals that consume the green plants are called
- (a) Herbivores (b) Producers
(c) Omnivores (d) Decomposers
4. Which one of the following hydrophytic plant freely float on the surface of water?
- (a) Utricularia (b) Nymphaea
(c) Pistia (d) Cyperus
5. The part of plant formation in which more than two species are dominant is called
- (a) Association (b) Consociation
(c) Plant formation (d) Lociation
6. Analysis of plant community using square or rectangular sample plot is called
- (a) Quadrat Sampling (b) Transect Sampling
(c) Loop Sampling (d) Point Sampling

7. Cleaning up of toxic contaminants in the environment using microbes is called
- (a) Bioremediation
 - (b) Biodegradation
 - (c) Phytoremediation
 - (d) Bioleaching
8. The use of transgenic plants for environmental clean-up is called
- (a) Biodegradation (b) Bioleaching
 - (c) Bioremediation (d) Phytoremediation
9. The occurrence of a species or genus in a restricted geographical area is called
- (a) Endemism (b) Endangered
 - (c) Monotypic (d) Holotypic
10. The continental drift was first proposed by
- (a) Wegner (b) Watson
 - (c) Crick (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 Nitrogen Cycle.

Or

- (b) Explain the role of light which influence on vegetation.

12. (a) Describe the structure of forest ecosystem.

Or

- (b) Explain the anatomical adaptations of hydrophytes.

13. (a) Write short notes on Association.

Or

- (b) What is transect method? Give any two uses of transect method.

14. (a) Write notes on Bioleaching.

Or

- (b) Give a brief account on Bioindicators.

15. (a) Write on the evidences favouring continental drift.

Or

- (b) Briefly describe the vegetational types of Tamilnadu.

PART C — ($5 \times 8 = 40$ marks)

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

Each answer should not exceed 600 words.

16. (a) Give a detailed account on Carbon Cycle.

Or

- (b) Explain the role of microbes which influence on vegetation.

17. (a) With suitable examples, explain anatomical adaptations of xerophytes.

Or

- (b) Describe morphological adaptations of hydrophytes.

18. (a) Explain the method of studying vegetation by quadrat method.

Or

- (b) Distinguish between association and consociation giving examples.

19. (a) Write an essay on Biodegradation.

Or

- (b) Write an essay on Biosensors.

20. (a) Mention the centre of origin of tomato and paddy.

Or

- (b) Write an essay on remote sensing.
-