

(6 pages)

Reg. No. :

Code No.: 6532

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M.Sc. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2021

First Semester

Botany - Core

ALGOLOGY AND BRYOLOGY

(For those who joined in July 2021 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. Plants which are not differentiated into roots, stem and leaves are grouped under
(a) Pteridophytes (b) Thallophytes
(c) Spermatophytes (d) Gymnosperms
2. The algae which help in the fixation of nitrogen belongs to the class
(a) Cyanophyceae (b) Rhodophyceae
(c) Phaeophyceae (d) Chlorophyceae

3. The _____ is the vegetative body of algae.
- (a) Mycelium
 - (b) Pseudoplasmodium
 - (c) Thallus
 - (d) Is scattered the least by smoke or fog
4. Algae have cell wall made up of
- (a) Cellulose, galactans and mannans
 - (b) Pectins, cellulose and proteins
 - (c) Chitin
 - (d) Cellulose, hemicellulose and pectins
5. Agar and carrageenan are polymers of _____
- (a) Glucose
 - (b) Galactose
 - (c) Starch
 - (d) Phosphoric acid
6. Algal bloom is due to and results in -
- (a) Distinct color to the water bodies
 - (b) Presence of large amount of nutrients in water
 - (c) Excessive growth of free floating or planktonic algae
 - (d) All of these

7. Independent male and female gametophytes are present in
- (a) Pinus (b) castor
(c) Sphagnum (d) mustard
8. In Funaria, the antherozoids are
- (a) Aciliated (b) Biciliated
(c) Multiciliated (d) Monociliated
9. Which of the following has considerable economic importance?
- (a) Marchantia (b) Riccia
(c) Sphagnum (d) Porella
10. The most completely fossil Bryophyte is?
- (a) Hepaticites (b) Sphagnum
(c) Marchantia (d) Muscites

PART B — (5 × 5 = 25 marks)

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

11. (a) Give the outline of Fritsch classification.

Or

- (b) With neat diagram. explain the thallus structure of Euglenophyceae.

12. (a) Comment on the flagella, chromatophores, pyrenoids and eyespot.

Or

- (b) Write notes on the range of thallus structure.

13. (a) Enumerate the economic importance of algae.

Or

- (b) Give all illustrative note on role of algae in soil fertility.

14. (a) Highlight the outline of Rothmaler classification

Or

- (b) Write notes on the general characters of Jungermanniales.

15. (a) Explain the alternation of generations in Bryophytes.

Or

- (b) Describe the reproduction of Bryophytes.

PART C — (5 × 8 = 40 marks)

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

Each answer should not exceed 600 words.

16. (a) Describe the reproduction of Bacillariophyceae.

Or

- (b) Explain the thallus structure and reproduction of Rhodophyceae.

17. (a) Give an account on the algal pigments.

Or

- (b) Write an essay on alternation of generations in algae.

18. (a) Describe the laboratory and commercial cultivation of algae.

Or

- (b) Write an elaborate note on the algal blooms and toxic algae.

19. (a) Write an essay on the general characters of Bryophytes.

Or

- (b) Describe the general characters of *Sphagnum*.

20. (a) Write notes on the fossil bryophytes of Naiadita.

Or

(b) Write detailed notes on economic importance of Bryophytes.
