

(6 pages)

**Reg. No. :** .....

**Code No.: 6532**

**Sub. Code: ZBOM 11**

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 — ( $5 \times 5 = 25$  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 — ( $5 \times 8 = 40$  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.
-