

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 sexual reproduction in volvox.

Or

(b) Give an account on the life cycle patterns seen in Algae.

17. (a) Explain the sexual reproduction in Chara.

Or

(b) Write about the post fertilization changes takes place in Gracilaria.

18. (a) Describe the cultivation of Gracilaria.

Or

(b) Explain the economic importance of algae.

19. (a) Describe the mass culture of Nostoc.

Or

(b) Describe the mass culture of Spriculina.

20. (a) Explain sexual reproduction in marchantia.

Or

(b) Describe the sporophyte of marchantia.

8/6/23  
ALW

Reg. No. : .....

Code No. : 20526 E Sub. Code : CMBO 11

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

First Semester

Botany – Core

ALGAE AND BRYOPHYTES

(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 :

- The classification of Algae was proposed by  
(a) F.E. Fritsch (b) G.M. Smith  
(c) Linnaeus (d) Bentham
- Haplontic life cycle is found in  
(a) Chara (b) Sargassum  
(c) Gracilaria (d) Volvox



3. The male sex organ of Chara is called as
  - (a) Gemmae
  - (b) Nucule
  - (c) Globule
  - (d) Archegonium
4. Cryptoblasts are seen in
  - (a) Chara
  - (b) Sargassum
  - (c) Volvox
  - (d) Caulerpa
5. Alginic acid is obtained from
  - (a) Nostoc
  - (b) Volvox
  - (c) Sargassum
  - (d) Laminaria
6. The most important red algae used as human food is
  - (a) Ulva
  - (b) Gelidium
  - (c) Porphyra
  - (d) Chlorella
7. \_\_\_\_\_ is called as cyanobacteria.
  - (a) Chlorella
  - (b) Volvox
  - (c) Nostoc
  - (d) Chara
8. One of the following is consumed as single cell protein
  - (a) Ulva
  - (b) Nostoc
  - (c) Spirulina
  - (d) Chlorella
9. These plants are called as amphibious plants
  - (a) Pteridophytes
  - (b) Algae
  - (c) Fungi
  - (d) Bryophytes

10. The structure which helps in the dehiscence of capsule of marchantia is
  - (a) Seta
  - (b) Foot
  - (c) Gemmae
  - (d) Elaters

PART B — (5 × 5 = 25 marks)

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

11. (a) Classify the algae according to Fritsch.  
Or  
(b) Explain the structure of volvox colony.
12. (a) Explain the external structure of chara thallus with diagram.  
Or  
(b) Describe the internal structure of Sargassum stipe with suitable diagram.
13. (a) List out the uses of agar agar.  
Or  
(b) Explain the extraction methods of Carrageenin.
14. (a) Explain the structure of nostoc.  
Or  
(b) Describe the nutritive importance of spirulina.
15. (a) Classify bryophytes according to Rothmaler.  
Or  
(b) Describe the transverse section of marchantia thallus with diagram.

