

(6 pages)

Reg. No. :

Code No. : 5887

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M.Sc. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2020.

First Semester

Botany — Core

ALGOLOGY AND BRYOLOGY

(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. Who is regarded as the “Father of Indian Phycology”?
 - (a) Prof. M.O.P. Iyenger
 - (b) Prof. J.N. Mishra
 - (c) Prof. R.R. Mishra
 - (d) Prof. R.N. Singh

2. The classification of algae is based on
- (a) Type of pigment
 - (b) Nature of cell wall material
 - (c) Nature of reserve food
 - (d) All the above
3. Sexual reproduction and mobile cells are absent in
- (a) Chlorophyceae (b) Myxophyceae
 - (c) Rhodophyceae (d) Phaeophyceae
4. Botanical name of sea palm is
- (a) Polysiphonia (b) Postelsia
 - (c) Ectocarpus (d) Macrocystis
5. Iodine is obtained from the members of
- (a) Green algae (b) Brown algae
 - (c) Red algae (d) Blue, green algae
6. Alginic acid is obtained from
- (a) Brown algae (b) Red algae
 - (c) Yellow-green algae (d) Golden algae

7. Which of the following are water-soluble pigments?
(a) chlorophyll (b) biloproteins
(c) carotenoids (d) fucoxanthin
8. Which one of the following is a non-vascular embryophyte?
(a) Thallophyta (b) Bryophyta
(c) Pteridophyta (d) All the above
9. The largest bryophyte is
(a) Funaria (Moss) (b) Marchantia
(c) Megaceros (d) Dowsonia
10. Heteromorphic alternation of generation is commonly found in
(a) Algae (b) Fungi
(c) Bryophyta (d) All the above

PART B — ($5 \times 5 = 25$ marks)

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

Each answer should not exceed 250 words.

11. (a) Define thallophyta with suitable examples.

Or

- (b) Write short notes on structure and function of Cynophyceae.

12. (a) Write a short note on algal biofertilizer.

Or

- (b) Explain about the sexual reproduction of algae.

13. (a) Write short note on sex organs of chara.

Or

- (b) Describe the shapes of chloroplasts in algae.

14. (a) Give the concise account on the different types of rhizoids in Bryophytes.

Or

- (b) Give the general characters of Bryophytes.

15. (a) Describe the general characters of Rhodophyta.

Or

- (b) Explain about the Ecological adaptation and importance 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) Write an essay on the economic importance of algae.

Or

- (b) Describe the vegetative propagation in algae.
17. (a) Define alternation in generation point out difference between alternation of generation met within algae and bryophytes.

Or

- (b) Write an essay on differences between Riccia and Plagiochasma.
18. (a) Describe the asexual reproduction in algae giving suitable examples.

Or

- (b) Write an essay on the Reproduction in Bryophytes.

19. (a) Explain about the general characters of Bryophytes and interrelationships.

Or

- (b) Write an essay on soil fertility.

20. (a) Describe the comparatively pigments of algae and bryophyte.

Or

- (b) Economic importance of Algal blooms and fossil algae.
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