

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034



B.Sc. DEGREE EXAMINATION – PLANT BIOLOGY AND PLANT BIOTECHNOLOGY

FIRST SEMESTER – APRIL 2018

17/16UPB1MC01– ALGAE AND BRYOPHYTES

Date: 25-04-2018

Dept. No.

Max. : 100 Marks

Time: 01:00-04:00

PART A

Answer the following, each within 50 words:

(10 x 2 = 20 Marks)

1. What is phycoerthrin?
2. Define diplontic life cycle.
3. Define globule.
4. What is raphe?
5. Define SCP.
6. What is carrageenan?
7. Write any four characters of bryophytes.
8. What are liverworts?
9. Define fossil bryophytes
10. What is pseudoelaters?

PART B

Answer the following, each within 500 words. Draw diagrams and flowcharts wherever necessary:

(5 x 7 = 35 Marks)

11(a) Explain the various types of pigments in major divisions of algae.

(OR)

(b) Write a brief note on fossil algae

12(a) Describe the vegetative structure of *Volvox*.

(OR)

(b) Explain the reproduction in diatoms.

13(a) Algae are useful to mankind- Justify.

(OR)

(b) Explain the mass cultivation of blue-green algae.

14(a) Describe the salient features of Hepaticopsida.

(OR)

(b) Write notes on the Rothmalars classification of bryophytes.

15(a) Explain the thallus structure and habitat of *Marchantia*.

(OR)

(b) Explain the internal and external structure of *Funaria* capsule.

PART C

Answer any three of the following, each within 1200 words. Draw diagrams and flowcharts wherever necessary: (3 x 15 = 45 Marks)

16. Discuss the salient features of Fritsch classification of algae.
17. Describe the thallus structure and sexual reproduction in *Gracilaria*.
18. Discuss the economic importance and agriculture uses of algae.
19. Write an essay on the vegetative and reproductive structures in *Funaria*.
20. Explain the structure and development of sex organs in *Anthoceros*.
