

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034



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

FIRST SEMESTER – APRIL 2018

PB 1508– ALGOLOGY AND BRYOLOGY

Date: 25-04-2018
Time: 01:00-04:00

Dept. No.

Max. : 100 Marks

PART-A

ANSWER THE FOLLOWING, EACH WITHIN 50 WORDS ONLY:

(10x2=20)

1. What are phycobilins?
2. Define anisogamy
3. What are akinetes?
4. Write notes on coenobium.
5. Mention the uses of carageenin.
6. Comment on algae as biofuel.
7. What is heteromorphic alternation of generations?
8. Write notes on foot.
9. Distinguish elaters from pseudoelaters.
10. What is operculum?

PART-B

ANSWER THE FOLLOWING QUESTIONS, EACH WITHIN 500 WORDS.

DRAW DIAGRAMS WHEREVER NECESSARY:

(5x7=35)

11a. Describe the range of thallus in algae.

(or)

b. Write the salient features of cyanophyceae.

12a. Describe the habit of *Chara*.

(or)

b. Describe the LS of the male conceptacle of *Sargassum*.

13a. What is SCP? List the factors affecting the biomass of *Spirulina* production.

(or)

b. What are the applications of agar agar and alginates?

14a. Describe the various modes of vegetative reproduction in bryophytes.

(or)

b. Give an account on the economic importance of bryophytes.

15a. Describe the gametophyte of *Marchantia*.

(or)

b. Describe the female branch and the internal structure of archegonia in *Funaria*.

PART-C

ANSWER ANY THREE OF THE FOLLOWING, EACH NOT EXCEEDING 1200 WORDS.

DRAW DIAGRAMS WHEREVER NECESSARY:

(3x15=45)

16. Describe the various life cycle patterns in algae.

17. Explain sexual reproduction in *Gracilaria*.

18. Enumerate the steps of the mass cultivation of BGA. Add a note on its field applications.

19. Bring out the characteristics of the various classes of bryophytes.

20. Describe the sporophyte of *Anthoceros*.
