

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034



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

FIRST SEMESTER – APRIL 2016

PB 1508 – ALGOLOGY AND BRYOLOGY

Date: 02-05-2016

Dept. No.

Max. : 100 Marks

Time: 01:00-04:00

PART-A

Answer the following, each within 50 words only

(10 x 2 = 20)

1. Mention the reserve food of brown algae and red algae.
2. Write on fossil algae
3. What are autospores?
4. Define heterotrarchy.
5. Mention the source and uses of carageenin.
6. What are algal biofuel?
7. Write any two economic aspects of Bryophytes.
8. What is a gametophore?
9. Comment on apophysis.
10. What are scales?

PART-B

Answer the following, each within 500 words. Draw diagrams wherever necessary. (5 x 7 = 35)

11. a. Briefly describe the range of thallus organisation in algae.
(or)
b. What are the various means of vegetative reproduction in algae?
12. a. Describe the structure of *Anabaena*.
(or)
b. Describe the carposporophyte and tetrasporophyte of *Polysiphonia*.
13. a. Write on the production and harvesting of algal biomass.
(or)
b. What are the steps for the cultivation of cyanobacterial inoculants and its response to crops?
14. a. Mention the various modes of vegetative reproduction in bryophytes.
(or)
b. Give an account on fossil bryophytes.
15. a. Describe the internal structure of the thallus of *Marchantia*.
(or)
b. Describe the antheridial branch of *Funaria*

PART-C

**Answer any THREE of the following, each within 1200 words.
Draw diagrams wherever necessary.**

(3x15 = 45)

16. What are the various life cycle patterns in algae?
17. Describe the habit and sex organs of *Chara*.
18. Write short notes on the following:
 - a. algae as food
 - b. agar- agar
 - c. nutritive value of SCP
 - d. diatomite
 - e. algae as medicines.
19. Bring out the characteristics of the various classes of bryophytes.
20. Describe the Life cycle of *Anthoceros*.

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