



**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034**

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

FIRST SEMESTER – APRIL 2017

**PB 1508- ALGOLOGY AND BRYOLOGY**

Date: 26-04-2017  
09:00-12:00

Dept. No.

Max. : 100 Marks

**Part A (20 marks)**

*Answer the following, each within 50 words.*

*(10 x 2 = 20 marks)*

1. What is eyespot?
2. What are the two types of flagella found in algae?
3. What are akinetes?
4. Comment on receptacle.
5. What is SCP?
6. What are biofuels?
7. What are fossil Bryophytes? Give examples
8. What is alternation of generations?
9. What are pseudo elaters?
10. Define protonema.

**Part B**

*Answer the following, each within 500 words. Draw diagram and flow charts wherever necessary.*

*(5 X 7 = 35 marks)*

11. a) Give the distinguishing characters of Chlorophyceae.  
(Or)  
b) Illustrate the asexual reproduction in algae.
12. a) Describe the cell structure of *Chlorella*.  
(Or)  
b) Give the occurrence and vegetative structure of *Chara*.
13. a) Write the economic importance of Agar Agar, Alginate and Carrageenan.  
(Or)  
b) Give a brief note on mass cultivation of blue green algae.
14. a) Illustrate the salient features of Hepaticopsida.  
(Or)  
b) Explain the vegetative reproduction in Bryophytes.
15. a) Describe the internal structure of *Anthoceros*  
(Or)  
b) Comment briefly on the morphological nature of the antheridiophore of *Marchantia*

### Part C

*Answer any three of the following, each within 1200 words. Draw diagrams and flow charts wherever necessary.* (3 X 15 = 45 marks)

16. Give an account of classification of algae by Harold C Bold.
17. Explain the life cycle of *Gracilaria*.
18. Comment on the role of algae in food and fodder.
19. Describe the classification of Bryophytes.
20. Describe the sporophyte of *Marchantia*.

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