

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



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

**FIRST SEMESTER – NOVEMBER 2016**

**PB 1508 – ALGOLOGY AND BRYOLOGY**

Date: 11-11-2016

Dept. No.

Max. : 100 Marks

Time: 01:00-04:00

**PART – A**

Answer the following, each within 50 words only:

(10 x 2 = 20 marks)

1. What is heterocyst?
2. What Diplontic cycle?
3. Comment on Akinetes.
4. Define Coenobium.
5. What is a Starter culture?
6. State Algae as medicine.
7. What is Apospory?
8. What are elaters?
9. What is Archegoniophore?
10. Mention about Gametophore.

**PART – B**

Answer the following, each answer within 500 words, Draw diagrams/flowcharts wherever necessary.

(5 x 7 = 35 marks)

11. a) Write about fossil Algae.

(OR)

b) Give an account on flagellation in algae.

12. a) Compare the internal structure of thallus in *Sargassum* & *Gracilaria*.

(OR)

b) Explain sexual reproduction in *Chara*.

13. a) Discuss the role of algae in Industry.

(OR)

b) Define SCP. What are the steps involved in the production of *Spirulina*?

14. a) Give an account of fossil bryophytes with suitable example.

(OR)

b) Describe in detail the economic importance of Bryophytes.

15. a) Compare the internal structure of the thallus in *Marchantia* & *Anthoceros*.

(OR)

b) Draw and describe the sporophyte in *Funaria*.

**PART – C**

Answer any **THREE** of the following, each within 1200 words, Draw diagrams/flowcharts wherever necessary. (3 x 15 = 45 marks)

**16. How are algae classified based on the various types of Pigments and food reserves.**

**17. Explain sexual reproduction in *Polysiphonia*.**

**18. Write an essay on mass cultivation of BGA inoculants and its field application.**

**19. Write an essay on the general characteristics of bryophytes.**

**20. Explain the structure and unique features of sporophyte in *Anthoceros*.**

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