LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

**B.Sc.** DEGREE EXAMINATION – **PLANT BIOLOGY & PLANT BIO-TECH.**

FIRST SEMESTER – NOVEMBER 2012

# PB 1508 - ALGOLOGY AND BRYOLOGY

 Date : 08/11/2012 Dept. No. Max. : 100 Marks

 Time : 1:00 - 4:00

**PART – A**

**ANSWER THE FOLLOWING, EACH WITHIN 50 WORDS: (10 x 2 = 20 marks)**

01. What is Heterocyst?

02. What are phycobilins?

03. Define coenobium.

04. Write notes on carpospores.

05. What is diatomite?

06. Give the role of algae in medicine.

07. What is alternation of generation?

08. Define apogamy.

09. What are pseudo elaters?

10. What is protonema?

**PART – B**

**ANSWER THE FOLLOWING, EACH WITHIN 500 WORDS. DRAW DIAGRAMS, FLOW CHARTS WHEREVER NECESSARY: (5 x 7 = 35 marks)**

11. a) Enumerate the salient features of Cyanophyceae.

 (OR)

 b) Describe any one method of life cycle pattern in algae.

12. a) Explain the male and female conceptacle of *Sargassum.*

 (OR)

 b) With the help of neat diagram, describe the thallus structure of *Chara*.

13. a) *Spirulina* as single cell protein - Discuss.

 (OR)

 b) Give the uses of algae in agriculture and space research.

14. a) List out the characteristic features of Hepaticopsida.

 (OR)

 b) Mention the economic importance of Bryophytes.

15. a) Describe the external and internal structure of *Anthoceros* thallus.

 (OR)

 b) Give an illustrated account of *Funaria* capsule.

**PART – C**

**ANSWER ANY THREE OF THE FOLLOWING, EACH WITHIN 1200 WORDS. DRAW DIAGRAMS, FLOW CHARTS WHEREVER NECESSARY.**

**(3 x 15 = 45 marks)**

16. Discuss the thallus organization of Algae.

17. Trace the life cycle of *Ectocarpus.*

18. Explain isolation, mass cultivation and field application of Blue green algae.

19. Write an account on the various modes of reproduction in Bryophytes.

20. Describe the structure and reproduction of *Marchantia*.

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