



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

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

FIRST SEMESTER – APRIL 2013

PB 1508 - ALGOLOGY AND BRYOLOGY

Date: 09/05/2013
Time: 1:00 - 4:00

Dept. No.

Max. : 100 Marks

PART A

ANSWER THE FOLLOWING, EACH WITHIN 50 WORDS ONLY :

(10 x 2= 20)

01. What are the flagella types encountered in algae ?
02. Comment on fossil algae.
03. Mention the significance of cyanobacterial.
04. How are daughter colonies formed in *Volvox*?
05. Name any four algae used as food.
06. What type of algae are used as a source of biofuels ?
07. Why are bryophytes called amphibians of the plant kingdom ?
08. Which group of plants are commonly called hornworts.
09. What is the function of peristome?
10. How is the sporophyte of *Marchantia* protected ?

PART B

ANSWER THE FOLLOWING, EACH WITHIN 500 WORDS:

DRAW DIAGRAMS/FLOWCHARTS WHEREVER NECESSARY:

(5 x 7 = 35)

11. a. Explain the range of thallus organization in algae with suitable examples.
(OR)
b. Give an account of the different types of asexual reproduction.
12. a. Represent the life cycle of *Sargassum* schematically.
(OR)
b. Describe the sex organs of *Chara*.
13. a. How is mass cultivation of *Spirulina* done ?
(OR)
b. Give an account of algal biofertilizers.
14. a. List the characteristic features of Hepaticopsida.
(OR)
b. Comment on alternation of generations in bryophytes.
15. a. Describe the structure of *Anthoceros* sporophyte.
(OR)
b. Describe the structure of the sex organs of *Funaria*.

PART C

ANSWER ANY THREE OF THE FOLLOWING, EACH WITHIN 1200 WORDS:

DRAW DIAGRAMS/FLOW CHARTS WHEREVER NECESSARY:

(3 x 15 = 45)

16. Enumerate the salient features of algal divisions.
17. Give a detailed account of the life cycle of a red alga you have studied.
18. Give an account of the economic importance of algae.
19. With suitable examples, describe the various methods of reproduction encountered in bryophytes.
20. Describe sexual reproduction in *Marchantia*.

\$\$\$\$\$\$