

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086
(For candidates admitted during the academic year 2008-09 & thereafter)

SUBJECT CODE: BT/MC/AF14

B. Sc. DEGREE EXAMINATION, NOVEMBER 2008
BRANCH V (a) – PLANT BIOLOGY AND PLANT BIOTECHNOLOGY
FIRST SEMESTER

COURSE : MAJOR – CORE
PAPER : ALGAE, FUNGI AND LICHENS
TIME : 3 HOURS
MAX.MARKS:100

SECTION – A

ANSWER ALL QUESTIONS (6 X 1 = 6)

I FILL IN THE BLANKS:

1. Cyanobacteria are commonly known as _____.
2. The colony of *Volvox* is called _____.
3. *Cladophora* shows a type of branching called _____.
4. _____ is commonly called as bracket fungus.
5. The female sex organ of *Chara* is called _____.
6. *Usnea* is an example for a _____ lichen.

II CHOOSE THE RIGHT ANSWER (6 X 1 = 6)

7. Plakea stage is seen in
a) *Sargassum* b) *Nostoc* c) *Volvox*
8. The reserve food product of the red algae is
a) Laminarin b) Mannitol c) Floridean starch
9. Tikka disease of groundnut is caused by
a) *Puccinia* b) *Cercospora* c) *Aspergillus*
10. *Chara* is commonly referred to as
a) Stonewort b) Cup fungus c) Hornwort
11. *Albugo* causes a disease called
a) White rust b) Red rust c) Club root
12. The cell wall of brown algae is a source of
a) Carrageenan b) Alginates c) Agar-agar

III. STATE WHETHER TRUE OR FALSE: (6 X 1 = 6)

13. *Synchytrium* is a holocarpic fungus.
14. Imperfect Fungi are placed under Myxomycetes.
15. Heterocysts are present in *Nostoc*
16. *Plasmodiophora* causes club root of cabbage.
17. Clamp connections in fungi help in dikaryotisation.
18. The fertilized zygote of *Chara* is called zoospore.

IV. ANSWER ANY SIX QUESTIONS. EACH ANSWER NOT TO EXCEED 50 WORDS: (6X3=18)

19. Hormogone
20. Phycobilins
21. Amylum stars
22. Haustoria
23. Apothecium
24. Assimilator
25. Soredia
26. Sterigma
27. Dolipore septum.

SECTION – B

ANSWER ANY FOUR QUESTIONS. EACH ANSWER NOT TO EXCEED 200 WORDS: (4X6=24)

28. Draw and describe the apothecium of *Peziza*.
29. Describe the male sex organ of *Chara*.
30. Write notes on asexual reproduction in *Albugo*.
31. Describe the internal structure of Lichen thallus.
32. Describe the structure of the basidiocarp of *Polyporus*.
33. Describe process of reproduction in *Caulerpa*.

SECTION – C

ANSWER ANY TWO QUESTIONS. EACH ANSWER NOT TO EXCEED 1000 WORDS: (2X20=40)

34. Describe the structure and reproduction of *Sargassum*.
35. Give an account of the different types of spores produced by *Puccinia* by describing its life cycle.
36. Describe in detail the characteristics of the major fungal classes.
37. Write an essay on the life cycle of *Polysiphonia*.
