

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 2009
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. Heterocyst is the special type of cell in _____
2. Stipulode is the leaf like appendage seen in _____
3. _____ is the pigment responsible for brown colour thallus in *Sargassum*
4. _____ is the fungus belongs to the class fungi imperfectii
5. The fruiting body in *Peziza* is _____
6. _____ is called as white rust fungi

II CHOOSE THE RIGHT ANSWER

(6 X 1 = 6)

7. Trabeculae is the structure seen in _____
a) *Volvox* b) *Chara* c) *Caulerpa*
8. Air bladder is the structure produced to maintain floating nature of _____
a) *Sargassum* b) *Caulerpa* c) *Chara*
9. Carpospore is a diploid spore produced by _____
a) *Cladophora* b) *Polysiphonia* c) *Sargassum*
10. Tikka disease is caused by _____
a) *Polyporus* b) *Puccinia* c) *Cercospora*
11. The fungus having amoeboid movement is _____
a) *Albugo* b) *Plasmodiophora* c) *Cercospora*
12. Which of the following has the symbionts in its thallus?
a) *Caulerpa* b) *Sargassum* c) *Usnea*

III. STATE WHETHER TRUE OR FALSE:

(6 X 1 = 6)

13. Chytridiomycetes are water living fungi
14. *Albugo* is a rust fungus affecting groundnut
15. *Aspergillus* is a basidiomycete reproducing by axospores.
16. Biliproteins are present in blue green algae
17. *Volvox* is a coenobium consisting of 500 -5000 cells.
18. Trichoblasts are seen in *Polysiphonia*

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

19. Akinetes
20. Crown cells
21. Cystocarp
22. Budding
23. Conidiophore
24. Ascus
25. Uredospore
26. Hormogonia
27. Crustose lichen

SECTION – B

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

28. Give the outline of Bold and Wynne's classification of algae
29. Describe the structure of *Volvox* colony
30. Explain the structure of gametophyte of *Polysiphonia*
31. Differentiate ascomycetes from basidiomycetes
32. Illustrate the structure of *Synchytrium*
33. Explain reproduction in *Cercospora*

SECTION – C

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

34. Write an account on pigment system and reserve food materials in various algal divisions.
35. Explain life cycle of *Cladophora* with diagrams.
36. Illustrate the life cycle of *Puccinia* in two different host plants
37. Describe the structure and reproduction in *Aspergillus*
