



B. Sc. DEGREE EXAMINATION – NOVEMBER 2014
FIRST SEMESTER – B. Sc. BOTANY (COMPLEMENTARY)
COURSE – U1CPBOT1: CRYPTOGAMS, GYMNOSPERMS AND PLANT PATHOLOGY

Time: Three Hours

Max. Marks: 60

(Draw diagrams wherever necessary)

I. Answer **all** questions briefly: Each question carries 1 mark.

1. What are heterocysts?
2. Define diplobiontic life cycle.
3. What is coenobium?
4. What is heterothallism?
5. What are fruticose lichens?
6. Name a plant virus.
7. What is transfusion tissue?
8. What are endospores?

(1 x 8 = 8 marks)

II. Answer **any six** questions.

9. Explain cell division in *Oedogonium*.
10. Give an account of the chloroplast variation in green algae.
11. Describe the structure of apothecium in *Usnea*.
12. Draw the structure of sporophyte in *Riccia*.
13. Differentiate aplanospores and akinetes.
14. Enumerate the differences between Gram positive and Gram negative bacteria.
15. Rhizophore is an organ of "sui-generis". Comment.
16. Give a brief account on *Cycas* ovule.

(2 x 6 = 12 marks)

III. Answer **any four** questions.

17. Describe the post fertilization changes in *Polysiphonia*.
18. Explain the symptoms, causal organism and control measures of Leaf Mosaic of Tapioca.
19. Describe asexual and sexual reproduction in *Usnea*.
20. What are the different nutritional types of bacteria?

21. Describe the internal structure of *Riccia* thallus.

22. Describe the anatomy and growth pattern of coralloid root in *Cycas*.

(5 x 4 = 20 marks)

IV. Answer **any two** questions.

23. Describe the structure and reproduction in *Ectocarpus*. Add a note on its alternation of generations.

OR

24. Explain the structure and formation of various spores of *Puccinia*.

25. Describe the sexual reproduction in *Cycas*.

OR

26. Explain the anatomical and reproductive features of *Selaginella*.

(10 x 2 = 20 marks)

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