

B.SC. DEGREE END SEMESTER EXAMINATION: NOVEMBER 2023**SEMESTER 1: BOTANY (COMPLEMENTARY COURSE)****COURSE: 15U1CPBOT1: CRYPTOGRAMS, GYMNOSPERMS AND PLANT PATHOLOGY***(Common for Supplementary 2015/2016/2017/218 Admissions)*

Time: Three Hours

Max. Marks: 60

PART AAnswer **all** questions. Each question carries **1** mark.

1. What are polar nodules?
2. Who discovered virus?
3. What are coralloid root?
4. What are akinetes?
5. What is the reserve food material in Rhodophyceae?
6. Name the negatively geotropic root in Cycas.
7. Name the type of nucleic acid present in TMV.
8. What is chlorosis?

(1 x 8 = 8)**PART B**Answer **any six** questions. Each question carries **2** marks.

9. Differentiate between hormogonia and akinete.
10. Mention any two uses of lichens.
11. Explain the internal structure of Riccia Thallus.
12. How cap cells are formed in Oedogonium?
13. Explain the symptoms of nut fall of Arecanut.
14. What are plasmids?
15. What is the source of Agar- Agar? Mention its uses.
16. What are differences between archaebacteria and eubacteria?
17. What is a capsid?
18. Differentiate between homosporous and heterosporous condition.

(2 x 6 = 12)**PART C**Answer **any four** questions. Each question carries **4** marks.

19. Comment on the heterospory and seed habit.
20. Comment on the beneficial uses of fungi.
21. Briefly describe bacterial conjugation.
22. Describe the asexual reproduction in Nostoc.
23. Describe the structure of bacteriophage with a labelled diagram.
24. Explain the economic importance of gymnosperms.

(4 x 4 = 16)

PART D

*Answer **any two** questions. Each question carries **12** marks*

25. Give a detailed account on the sporophyte of Selaginella.
26. What is heteroecious fungus? Describe the life cycle of Puccinia with suitable diagrams?
27. Give an account on the causative organisms, symptoms and remedies for diseases.
28. Explain the internal structure of leaflet in Cycas.

(12 x 2 = 24)