Reg. No. :

Name :

Second Semester B.Sc. Degree Examination, December 2021

First Degree Programme Under CBCSS

Botany

BO 1231 : PHYCOLOGY, MYCOLOGY, LICHENOLOGY, BRYOLOGY, PTERIDOLOGY, GYMNOSPERMS AND PLANT PATHOLOGY

(2020 Admission Regular)

Time : 3 Hours

Max. Marks : 80

- I. Answer **all** questions in a word or few sentences. Each question carry **1** mark each.
- 1. What are tetraspores?
- 2. Name the reserve food found in Rhodophyceae.
- 3. Name the Lichens which are seen attached to the surface of rocks.
- 4. What are spur shoots?
- 5. What are oidia?
- 6. Name the organism where Zoospores with stephanokont type flagellation is found.
- 7. What are isidia?
- 8. What are cryptoblasts?
- 9. Name the causal organism of quick wilt of pepper.
- 10. What is meristoderm?

 $(10 \times 1 = 10 \text{ Marks})$

P.T.O.

- II. Answer **any eight** of the following questions (Each question carries **2** marks)
- 11. Write a short note on the preparation tobacco decoction.
- 12. Comment on the nature of association between Algae and fungus in Lichens.
- 13. What are chlamydospores?
- 14. Write short notes on the reserve food and pigments in Phaeophyceae.
- 15. Briefly explain the structure of heterocysts.
- 16. How Tapioca mosaic virus is transmitted to healthy plants?
- 17. Distinguish between homeomerous lichens and heteromerous lichens.
- 18. Comment on the cap cells of Oedogonium.
- 19. Distinguish between receptacles and conceptacles?
- 20. Why Puccinia is called a macrocyclic fungus?
- 21. Give an account of the anatomy of *Pinus* needle.
- 22. Discuss the structure of sporangia in *Rhizopus*.
- 23. Give an account of the structure of sporophyte in *Riccia*.
- 24. Briefly explain any two modes vegetative propagation in Chara.
- 25. What are sporangiophores?
- 26. Why bryophytes are called amphibians of plant Kingdom?

(8 × 2 = 16 Marks)

- III. Answer any six of the following questions (Each question carries 4 Marks)
- 27. Explain sexual reproduction in *Rhizopus*.
- 28. Give an account of the structure of apothecium in *Peziza*.
- 29. Discuss the general characters of Cyanophyceae.
- 30. Give the classification of Lichens based on morphology citing one example each.

- 31. Give an account of the major symptoms of Brown spot disease of Paddy.
- 32. Explain macrandrous type of sexual reproduction in *Oedogonium*.
- 33. Describe the role fungi in various industries.
- 34. Give an account of the Carposporophytic generation of *Polysiphonia*.
- 35. Explain the internal structure of Funaria axis.
- 36. Explain vegetative reproduction in *Riccia*.
- 37. Write a short note on the structure of saprophyte of *Funaria*.
- 38. Discuss the symptoms and control measures of quick wilt of Pepper.

(6 × 4 = 24 Marks)

- IV. Answer **any two** of the following Questions (Each question carries **15** Marks)
- 39. Give a detailed account of the beneficial role of Bryophytes.
- 40. Explain the life cycle of *Puccinia* with diagrams.
- 41. Explain the thallus structure of *Usnea*. Add a note on the economic importance of Lichens.
- 42. Explain the process of reproduction in *Pinus*.
- 43. Describe the symptoms, etiology and control measures of powdery mildew of Rubber.
- 44. Explain sexual reproduction in *Chara* with diagrams.

(2 × 15 = 30 Marks)