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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 × 1 = 10 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)