

Reg. No. :

Name :

Second Semester B.Sc. Degree Examination, September 2022

First Degree Programme under CBCSS

Botany

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

(2020 Admission Onwards)

Time : 3 Hours

Max. Marks : 80

- I. Answer **all** questions in a word or few sentences. Each question carries **1** mark each.
1. What are zygosporae?
 2. Name the reserve food found in Phaeophyceae.
 3. What are corticolous lichens?
 4. What are amyloid stars?
 5. Name the types of fungi which grow in dung
 6. Why autospores are so called?
 7. Name the causal organism of brown spot disease of Paddy.
 8. What are pyrenoids?

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9. Name the short branches in *Polysiphonia*
10. What are cap cells?

(10 × 1 = 10 Marks)

II. Answer any **eight** of the following questions. Each question carries 2 marks.

11. What are conceptacles?
12. Write a brief account of different kind of branches in *Pinus*.
13. Comment on the vegetative propagation in *Riccia*.
14. Write short notes on the reserve food and pigments in Rhodophyceae
15. What are heterocysts? Mention its function?
16. Discuss different types of rhizoids in *Riccia*.
17. What are aeciospores?
18. Give an account of the structure of zoospores in *Oedogonium*.
19. What are features of fruiticose lichens?
20. How Bordeaux mixture is prepared?
21. Mention the structure of pollen grains in *Pinus*.
22. Discuss the structure of mycelium in *Rhizopus*.
23. List the ecological role of Bryophytes.
24. Mention the major methods of reproduction in *Nostoc*.
25. Briefly explain the structure of megasporophyll in *Pinus*.
26. Distinguish between autecious and heteroecious fungi.

(8 × 2 = 16 Marks)

III. Answer any **six** of the following questions. Each question carries **4** marks.

27. Give an account of the classification of Gymnosperms.
28. Explain asexual reproduction in *Rhizopus*.
29. Write a short note on the economic importance of Lichens
30. List the major symptoms of Powdery mildew of Rubber. Add a note on the control measures of the disease.
31. Explain the structure of *Pinus* male cone.
32. Explain the thallus structure of *Sargassum*.
33. Discuss the xerophytic characters of *Pinus* needle.
34. Explain the structure of globule in *Chara*.
35. Draw a neat labelled diagram of *Peziza* apothecium.
36. Give an account of sexual reproduction in nanandrous species of *Oedogonium*.
37. Explain the structure of archegonium of *Riccia*.
38. Discuss the symptoms and transmission of Tapioca Mosaic disease.

(6 × 4 = 24 Marks)

IV. Answer any **two** of the following questions. Each question carries **15** marks.

39. Explain the life cycle of *Polysiphonia* with necessary diagrams.
40. Describe the symptoms, etiology and control measures of quick wilt of pepper
41. Explain the process of reproduction in *Funaria*.
42. What are lichens? Explain the structure and reproduction in *Usnea* with diagrams.
43. Explain the stages of life cycle of *Puccinia* in Wheat plants.
44. Give a detailed account of the beneficial role fungi.

(2 × 15 = 30 Marks)