

Reg. No. : .....

Name : .....

**Second Semester B.Sc. Degree Examination, September 2022**

**First Degree Programme Under CBCSS**

**Botany**

**Complementary Course**

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

**(2014 - 2018 Admission)**

Time : 3 Hours

Max. Marks : 80

I. Write short notes of the following. All questions are Compulsory.

1. Sporangiphore in Rhizopus.
2. What is mycorrhiza?
3. What is cystocarp?
4. Mention helotism in lichens.
5. What is necrosis?
6. Sporophyte of Funaria.
7. What are akinetes?

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8. Define heteromorphic life cycle.
9. Name the pathogen which cause powdery mildew of Rubber?
10. What is a heteroecious fungus?

(10 × 1 = 10 Marks)

II. Answer **any eight** of the following questions.

11. Explain cell structure in Chlorella.
12. What is a soredium?
13. Cap cell in Oedogonium.
14. Write on the different types of stored food in algae.
15. Write the major characteristics of sporophyte of Riccia.
16. Justify "Selaginella is evolved for leading terrestrial life".
17. Draw the structure of apothecium in Peziza.
18. How do the sporophylls are arranged in Selaginella?
19. Bordeaux mixture.
20. Comment on the pollengrain in Pinus.
21. Differentiate hypha and mycelium.
22. Differentiate prothallus from protonema.

(8 × 2 = 16 Marks)

III. Answer **any six** of the following questions. Answer do not exceed **120** words.

23. Morphological features of reproductive structures in Pinus.
24. Write the economic significances of Lichens.
25. With the help of diagram explain the anatomy of Pteris petiole.

26. Comment on the evolutionary significance of heterospory.
27. Describe the sexual reproduction in *Usnea*.
28. Describe the sexual reproduction in *Chara*.
29. Give an account on types of Lichens.
30. Sex organs in *Sargassum*.
31. What are the different types of spores produced in *Puccinia*?

**(6 × 4 = 24 Marks)**

IV. Write an essay on **any two** of the following questions.

32. Explain the economic importance of Fungi with suitable examples.
33. Describe the symptoms, causative organism and control measures of Tapioca Mosaic disease.
34. Explain the major advancements seen in the life cycle of *Polysiphonia*.
35. With the help of suitable diagrams, explain the life cycle of *Selaginella*.

**(2 × 15 = 30 Marks)**