

Reg. No. :

Name :

First Semester M.Sc. Degree Examination, May 2022

Botany

**BO 211 — PHYCOLOGY, MYCOLOGY, MICROBIOLOGY AND PLANT
PATHOLOGY**

(2019 Admission onwards)

Time : 3 Hours

Max. Marks : 75

Draw diagrams and illustrate with examples wherever necessary.

I. Answer the following questions.

1. What is Coenobium? Give example.
2. Name the photosynthetic pigments in Cyanophyceae.
3. What is algal ensilage?
4. What are Pycnidia?
5. What are algal fungi? Give example.
6. From which Fungi the gibberellin was isolated for the first time?
7. What is Wet sterilization?
8. What are Prions?
9. Give the name of the causative organism of Red rot of sugarcane.
10. What are bio-inoculants?

(10 × 1 = 10 Marks)

P.T.O.



II. Answer the following questions in not more than **50** words.

11. (a) Write any four features of Bacillariophyceae.

OR

(b) What is Gaidukov Phenomenon?

12. (a) Name four edible algae.

OR

(b) Name four edible fungi.

13. (a) Describe the thallus of Nidularia.

OR

(b) Explain the thallus of Schizophyllum.

14. (a) What are VBNC? Give example.

OR

(b) What are halophilic bacteria? Give example.

15. (a) Write major principles of host-parasite interaction.

OR

(b) What is meant by epidemiology?

(5 × 2 = 10 Marks)

III. Answer the following questions in not more than **150** words.

16. (a) Give an account of major contributions of Indian Algologists.

OR

(b) Describe the anatomy of thallus of Gracilaria.

17. (a) Describe the thallus structure of Nitella.

OR

(b) Explain the algae used as biofertilizers.



18. (a) Outline the Fungal classification by Kirk et al. (2008).

OR

(b) What are the major contributions by Indian Mycologists?

19. (a) Write on economic importance of fungi with reference to secondary metabolites.

OR

(b) Explain reproduction in Fungi imperfecti.

20. (a) Describe metal bleaching process by microbes.

OR

(b) Give an account of Antibiotics from microbes.

21. (a) Describe Chemostat in detail.

OR

(b) Give an account of Actinomycetes.

22. (a) Explain different types of resistance of defence mechanisms.

OR

(b) Write notes on Fungicides and pesticides

(7 × 5 = 35 Marks)

IV. Answer the following questions in not more than **250** words.

23. (a) Describe thallus organization in Algae with special notes on evolutionary trends.

OR

(b) Explain algal classification by F.E. Fritsch.

24. (a) Give an account of Fungal classification by Alexopoulos, 1996.

OR

(b) Write an essay on the role of Microbes in Agriculture.

(2 × 10 = 20 Marks)

