

**FOUR YEAR HONOURS B.Sc. DEGREE EXAMINATION,
JUNE/JULY - 2024**

CHOICE BASED CREDIT SYSTEM

SECOND SEMESTER - MINOR

PART - II : BOTANY

**PAPER - 3 : NON-VASCULAR PLANTS (ALGAE, FUNGI, LICHENS AND
BRYOPHYTES**

(Under CBCS New Regulation w.e.f. the academic Year 2023-24)

Time : 3 Hours

Max. Marks : 75

Section - A

Answer any **Five** of the following questions. Each question carries equal marks. **(5×5=25)**

1. Cell Structure of algae
2. Thallus organization in algae
3. Unilocular and Plurilocular sporangia
4. Culture and cultivation of Chlorella
5. General characters in Fungi
6. Heterothallism and Para Sexuality
7. Sexual reproduction in ascomycetes
8. Antheridiophore and Archegoniophore of Marchantia
9. Sporophyte of Funaria
10. Types of Lichens

Section - B

Answer **All** questions. Each question carries equal marks.

(5×10=50)

11. a) Describe the Life cycles in algae.

(OR)

- b) Describe the criteria used in classification of algae emphasizing on Less system classification.

12. a) Describe the life history of Rhodophyceae member you have studied.

(OR)

b) Write a brief account of Bacillariophyceae.

13. a) Write an account on Ainsworth system of classification.

(OR)

b) Write an account on ecological and economic importance of fungi.

14. a) Give an account of various stages in life history of the Fungus which causes Black stem rust of wheat and suggest the methods of its control.

(OR)

b) Describe the structure and reproduction in Lichens. Add a note on their economic importance.

15. a) Write a general account on evolution of sporophytes in Bryophyta.

(OR)

b) Describe the life history of Funaria.

FOUR YEAR B.Sc. HONOURS DEGREE EXAMINATION, JUNE/JULY - 2024

CHOICE BASED CREDIT SYSTEM

SECOND SEMESTER - MAJOR

PART - II : BOTANY

Paper - 3 : Non-Vascular Plants (Algae, Fungi, Lichens and Bryophytes)

(Under CBCS New Regulation w.e.f. the academic Year 2023-24)

Time : 3 Hours

Max. Marks : 75

SECTION - A

Answer any Five of the following questions. Each question carries equal marks. (5×5=25)

- 1/ Habitats of algae
2. Ectocarpus sexual reproduction
3. Characteristic features of Chlorophyceae
4. Culture and Cultivation of Algae
5. Nutrition in Fungi
6. Heterothallism and Parasexuality
- 7/ Life cycle of Phytophthora
- 8/ General characters of Bryophyta
- 9/ Sporophyte of Anthoceros
- 10/ Economic importance of Lichens

SECTION - B

Answer All questions. Each question carries equal marks.

(5×10=50)

11. /a) Describe the economic importance of algae.

(OR)

- /b) Describe the criteria used in classification of algae emphasizing on Frisch's classification.

12. ✓a) Describe the life history of Xanthophyceae member you have studied.

(OR)

b) Write a brief account of Bacillariophyceae.

13. a) Write an account on general characters of fungi.

(OR)

b) Describe briefly various methods of sexual reproduction in Fungi.

14. ✓a) Give an account on life history of Rhizopus.

(OR)

✓b) Give a general account of structure, Biology and economic importance of Lichen.

15. ✓a) Write a general account on evolution of sporophytes in Bryophyta.

(OR)

✓b) Describe the life history of Hepaticopsida you have studied.
