

M. Sc. (Previous) Examination; 2001

BOTANY

First Paper

(Phycology and Bryology)

Time—Three Hours
Maximum Marks—100

Attempt **FIVE** questions,
selecting at least **TWO** questions from each section.
All questions carry equal marks.

SECTION A

1. Write detailed notes on **6+7+7**
 - (A) Algal pigments
 - (B) Evolution of sex in algae
 - (C) Range of thallus organisation.

2. Describe various types of life cycles found in Chlorophyceae and Rhodophyceae. **20**

3. Discuss the following **6+8+6**
 - (A) Systematic position of Chara
 - (B) Criteria for classification of algae
 - (C) Algae as biofertilizer and fodder.

4. Give characteristic features of: **6+8+6**
 - (a) Prasinophyceae
 - (b) Phacophyceae
 - (c) Pro-chlorophyceae.

5. Describe the following: — **10+10**
 - (a) Sexual reproduction in Chactophorales
 - (b) Reproduction in Cyanophyceae.

SECTION B

6. Give characteristic features of different classes of bryophytes and classification of liverworts. **20**

7. Describe the development and structure of sporophyte of Marchantia, Anthoceros and Calobryum. **20**

8. Describe the salient features of jungermanniales and sexual reproduction of any one genus of the order. **20**

9. Write detailed description of: **7+5+8**
- (a) Takakia
 - (b) Buxbaumia
 - (c) Monoclea.
10. Discuss the following: — **6+7+7**
- (a) Ecology of Bryophytes
 - (b) Economic importance
 - (c) Affinities of Anthocerotales