

**October 2025**  
**B.A./B.Sc.**  
**First Semester**  
**MAJOR – 1**  
**BOTANY**  
*Course Code: BOM 1.11*  
(Phycology & Mycology)

Total Mark: 50

Pass Mark: 20

Time: 2 hours

I. Answer the following questions.

1. (a) Describe the range of thallus organization in algae. Write a brief account on the modes of reproduction in algae. 8+4=12

OR

- (b) Give an account of the life cycle of *Polysiphonia* with the help of a suitable diagram. 12

2. (a) Discuss in detail the life cycle of *Puccinia* along with diagram. 12

OR

- (b) Give a detailed account of the classification of fungi by Alexopoulos. 12

3. (a) Give a detailed account of the classification of lichens based on their structure. 12

OR

- (b) Explain in detail the reproduction in slime moulds with appropriate diagram. 12

II. Answer any two of the following questions.

4. Write a note on the life cycle of *Rhizopus*. 7
5. Describe the methods of reproduction in *Nostoc*. 7
6. Describe the significance of mycorrhizae. 7