

Roll No. ....

Total Pages : 02

**OCMDE/M-20**

**4738**

**BOTANY BRYOPHYTES**

**BOT-202**

Time : Three Hours]

[Maximum Marks : 80

**Note :** Q. No. **1** is compulsory. Attempt *one* question from each Unit. All questions carry equal marks.

**Compulsory Question**

1. (i) Bryophytes and tracheophytes.  
(ii) Elaterophores  
(iii) Gemmae  
(iv) Cleistocarpous and stegocarpous moss  
(v) Alternation of generation  
(vi) Vaginula  
(vii) Acrogynous development  
(viii) Sporocarp. **2×8=16**

**Unit I**

2. With the help of labelled diagrams describe the structure of sporophyte of the following :
  - (i) *Pellia* **8**
  - (ii) *Anthoceros*. **8**

3. Give an account on the gametophyte and sporophyte of *Calobryum*. 16

### Unit II

4. Describe the following :  
(i) Peculaites of gametophore of *Sphagnum* 8  
(ii) L.S. sporophyte of *Funaria*. 8
5. Describe in detail the origin and evolution of sporophyte in bryophyte. 16

### Unit III

6. Write a detailed note on the cytology of bryophytes. 16
7. Discuss in detail the effect of physical factors on protonemal growth and bud formation. 16

### Unit IV

8. Describe in detail the effect of chemical factors on the formation of gametangia in bryophytes. 16
9. Write down the explanatory notes on the following :  
(i) Bryophytes as a source of biologically active compounds 8  
(ii) Bryophytes as a indicators of pollution and minerals. 8