

1M/BOT-100 (Th) Syllabus-2023

2 0 2 4

(December)

FYUP : 1st Semester Examination

MAJOR

BOTANY

**(Plant Diversity-I, Algae, Bryophyte
and Pteridophytes)**

BOT-100

Marks : 56

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

Answer question no. **1** which is compulsory and
any **four**, selecting **one** from each section

- 1.** Write short notes on the following . 4×4=16
- (a) Characteristic features of the class
Chlorophyceae
 - (b) Mature sporophyte of *Anthoceros*
 - (c) Strobilus of *Selaginella*
 - (d) Cystocarp of *Polysiphonia*

D25/826

(Turn Over)

SECTION—I

2. With the help of suitable diagrams, describe the sexual reproduction in macrandrous sp. of *Oedogonium*. 10
3. With the help of suitable diagrams, describe the range of thallus structures in algae. 10

SECTION—II

4. With the help of suitable diagrams, describe the structure of antheridiophore and archegoniophore of *Marchantia*. 5+5=10
5. Give an illustrated account of the range of the gametophytic structures of *Bryophytes*. 10

SECTION—III

6. Describe the salient features of Pteridophytes and give an outline of the classification of pteridophytes with reference to Smith (1955). 10
7. With the help of suitable diagrams, describe the different types of gametophytes in *Lycopodium*. 10

SECTION—IV

8. Write notes on the following : $5 \times 2 = 10$

- (a) Sex organs of *Chara*
- (b) Rhizophore of *Selaginella*

9. Write notes on the following : $5 \times 2 = 10$

- (a) Morphology of mature gametophyte of *Funaria*
- (b) Protostele

Time : 3 hours

The figures in the margin indicate full marks for the questions

Answer question no. 1 which is compulsory and any four, selecting one from each section

1. Write short notes on the following : $4 \times 4 = 16$

- (a) Characteristic features of the class Charophyceae
- (b) Mature sporophyte of *Anthoceros*
- (c) Sporidia of *Selaginella*
- (d) Cystocarp of *Polysiphonia*