

1/EH-62 (i) (Syllabus-2015)

2019

(October)

BOTANY

(Elective/Honours)

[BOT-ELH-101 (T)]

(Algae, Bryophytes and Pteridophytes)

Marks : 56

Time : 3 hours

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

Answer Question No. 1 which is compulsory and
other **four**, selecting **one** from each Section

1. Write notes on the following : 4×4=16

- (a) Haplontic life cycle in green algae
- (b) Structure of globule in *Chara*
- (c) Economic importance of *Sphagnum*
- (d) Ecological importance of pteridophytes

(Turn Over)

(2)

SECTION—I

2. Give an account of Fritsch's classification of algae with its salient characters. 10

3. Describe the range of vegetative structures in chlorophyceae with suitable diagrams. 6+4=10

SECTION—II

4. Give an account on the evolution of sex in algae. 10

5. With the help of diagrams, explain the mode of asexual reproduction in *Ectocarpus*. 2+8=10

SECTION—III

6. Describe the evolution of gametophyte in Bryophytes. 10

7. Describe the following with suitable diagrams : 5×2=10

(a) Sporophyte of *Anthoceros*

(b) Female reproductive structure of *Marchantia*

20D/31

(Continued)

(3)

SECTION—IV

8. With the help of suitable diagrams, describe the following : 5+5=10

(a) Different types of gametophytes of *Lycopodium*

(b) L/S of strobilus of *Selaginella*

9. Discuss the evolution of stele in pteridophytes with suitable diagrams. 8+2=10

20D—3200/31

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