

BOT-ELH—101 (Syllabus-2015)

2015

(October)

BOTANY

(Elective/Honours)

FIRST PAPER

(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
four questions, selecting **one** from each Section

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

- (a) Cell structure of diatoms
- (b) Globule of *Chara*
- (c) Archegoniophore of *Marchantia*
- (d) Strobilus of *Selaginella*

(2)

SECTION—I

2. Describe, in detail, the range of vegetative structures in Chlorophyceae with diagrams. 10
3. Give an account of Fritsch's classification with its salient characters. 10

SECTION—II

4. Describe, with diagrams, the life cycle of *Polysiphonia*. 10
5. Write, in detail, the evolution of sex in algae. 10

SECTION—III

6. With the help of suitable diagrams, describe the evolution of sporophytes in bryophytes. 10
7. Give an illustrative account of the range of gametophytic structures in bryophytes. 10

(3)

SECTION—IV

8. Discuss the evolution of stele in pteridophytes with suitable diagrams. 10
9. (a) With suitable diagrams, describe different types of gametophyte of *Lycopodium*. 6
- (b) Write a note on the economic importance of pteridophytes. 4
