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(February)

BOTANY

(Elective/Honours)

(**Algae, Bryophytes and Pteridophytes**)

[BOT-ELH-101]

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 from the rest,
selecting **one** from each Section

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

- (a) Diplontic life cycle in green algae
- (b) Cell structure of diatoms
- (c) Gametophyte of *Sphagnum*
- (d) Rhizophore of *Selaginella*

SECTION—I

- 2.** Give an account of Lee's classification of algae. 10
- 3.** Describe the range of vegetative structure of Rhodophyceae with suitable diagrams. 7+3=10

SECTION—II

- 4.** Give an account on the economic importance of algae. 10
- 5.** Describe the sexual reproduction of *Chara* giving suitable diagrams. 7+3=10

SECTION—III

- 6.** Give an illustrated account of the evolution of the sporophytes in bryophytes. 10
- 7.** Write on the following : 5×2=10
 - (a) Classification of bryophytes according to Proskauer
 - (b) Antheridiophore of *Marchantia*

(3)

SECTION—IV

8. Describe heterospory and seed habit in pteridophytes. 10
9. Write notes on the following : 5×2=10
- (a) Gametophytes of *Lycopodium*
 - (b) Economic importance of pteridophytes

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