

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

**2022**

**( November )**

**BOTANY**

**( Elective/Honours )**

**[ BOT-ELH-101 ]**

**( 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) Globule of Chara
- (b) Haplontic life cycle in algae
- (c) Structure and function of gemma cups
- (d) Strobilus of *Selaginella*

( 2 )

**SECTION—I**

2. Give an account of Fritsch's classification of algae. 10
3. Describe the range of vegetative structure in Chlorophyceae with suitable diagrams. 7+3=10

**SECTION—II**

4. Give an account of evolution of sex in algae. 10
5. With the help of suitable diagrams, describe the post-fertilization changes in *Polysiphonia*. 4+6=10

**SECTION—III**

6. Giving suitable diagrams, discuss the origin of bryophytes. 3+7=10
7. Write notes on the following : 5×2=10
- (a) Archegoniophore of *Marchantia*
- (b) Sporophyte of *Anthoceros*

( 3 )

**SECTION—IV**

8. Discuss the evolution of stele in pteridophytes with suitable diagrams. 7+3=10
9. Describe the classification of pteridophytes according to Smith. 10

\*\*\*