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**1 SEM TDC BOT M 1**

**2018**

( November )

BOTANY

( Major )

Course : 101

**( Algae, Fungi and Lichen )**

*Full Marks* : 48
*Pass Marks* : 19/14

*Time* : 2 hours

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

1. *(a)* Answer as directed : 1×5=5

*(i)* Cap cells are found in *Spirogyra/ Chara/ Vaucheria/ Oedogonium.*
(Choose the correct answer)

*(ii)* Nitrogen fixation in the soil is caused by _____ algae.
(Fill in the blank)

*(iii)* Hard and brittle sponangial wall of Myxomycetes is called _____.
(Fill in the blank)

(iv) Write the name of a heterothallic fungus.

(v) Which lichen is commonly called 'reindeer moss'?

(b) Write short accounts of the following : 3×4=12

(i) Thallus structure of *Vaucheria*

(ii) Salient features of *Bacillariophyceae*

(iii) Fruit body of *Cyathus*

(iv) Development of ascus and ascospore in *Peziza*

**2.** Give a detailed account of the range of thallus structure in algae with suitable diagrams. 8+4=12

*Or*

Give a comparative account of the thallus structure of *Ectocarpus* and *Polysiphonia*. Describe the methods of asextual reproduction in *Ectocarpus* with suitable diagrams. 8+4=12

**3.** With suitable diagrams, write the mode of sexual reproduction found in different groups of fungi. Which type is highly evolved and why? 9+1+2=12



( Continued )

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*Or*

Give a comparative account of the conidiophore and conidia of *Aspergillus* and *Alternaria*. Also, write a note on the development and dessimination of sporangia of *Albugo*. 6+4+2=12

**4.** What do you mean by consortium? Draw and describe the internal structures of homoiomerous and heteromerous lichen thallus. 2+2½+2½=7

*Or*

Mention the features of special interest in lichen. Why are lichens normally not found in cities? 5+2=7

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