

Total No. of Printed Pages—3.

1 SEM TDC BOT M 1

2 0 1 7

(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) The storage food of red algae is

(Fill up the blank)

(ii) Phycocyanin is the characteristic pigment of myxophyceae / chlorophyceae / xanthophyceae / phaeophyceae.

(Choose the correct answer)

(2)

(iii) The double reduction in the number of chromosomes in the ascus.

(Express in one word)

(iv) Write the name of a 'polymorphic fungus'.

(v) The algal component of lichen is called _____.

(Fill up the blank)

(b) Write short accounts of the following :

3×4=12

(i) Formation of auxospores in *Centrales*

(ii) Conidiophore and conidia of *Penicillium*

(iii) Heterothallism in *Rhizopus*

(iv) Heterocyst

2. Give a detailed account of the phylogeny and distribution pattern of algae in India. Write briefly about the economic importance of algae.

4+4+4=12

Or

Describe with diagram the structure of the thallus and sexual reproduction in *Fucus*. State the phenomenon of alternation of generation observed in this plant.

4+4+4=12

(3)

3. Describe the life history of an edible fungus that you have studied. State its systematic position. 10+2=12

Or

Describe briefly the mode of nutrition and mode of spore dispersal in Fungi. 5+7=12

4. What are the various vegetative structures met within lichen thallus? Give a brief account of the reproduction in lichen. 3+4=7

Or

Mention the function of mycobiont of a lichen. Describe with diagram the detailed internal structure of a foliose lichen. 2+5=7
