

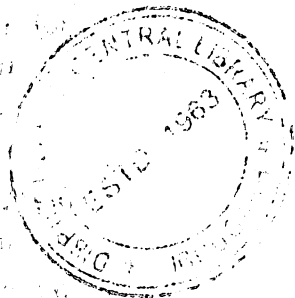
1 SEM TDC BOT M 1

2017

(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

(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)

(Turn Over)

(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 : $3 \times 4 = 12$

- (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. $2+5=7$
