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(March)

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) Choose the correct answer of the following : 1×5=5

(i) Algae possess the green pigment known as fucoxanthin/carotene/chlorophyll.

(ii) The gametic union of two morphologically similar gametes is known as isogamy/anisogamy/oogamy.

(iii) Phycocyanin is the characteristic pigment of chlorophyceae/phaeophyceae/Myxophyceae.

(iv) *Puccinia graminis* form 4 numbers/ 6 numbers/5 numbers of spore forms in their life cycle.

(v) The lichen *Cladonia* is commonly known as reindeer moss/bog moss/club moss.

(b) Write short accounts of the following (any three) : $4 \times 3 = 12$

(i) Economic importance of algae

(ii) Oogamous sexual reproduction in algae

(iii) Difference between Uredospore and Teliospore

(iv) Fruit body of *Cyathus*

2. Describe with diagram about the reproduction of *Chara*. $4 + 8 = 12$

Or

What are the criteria based on which algae are classified? Give a brief account of the classification of algae suggested by Fritsch.

$4 + 8 = 12$

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

Or

Give a comprehensive account of the structure and life history of Myxomycetes stating its systematic position. 3+8+1=12

4. Write with diagram about the internal structure and reproduction of lichen. 3+4=7

Or

What are phycobionts and mycobionts of a lichen? Mention the mutual advantages gained by both the components in lichen. 2+2½+2½=7
