

3 (Sem-1) BOT M 1

2 0 1 7

BOTANY

(Major)

Paper : 1.1

(Plant kingdom, Algae and Fungi)

Full Marks : 60

Time : 3 hours

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

1. Fill in the blanks with appropriate word(s) :

1×7=7

- (a) In a lichen, the type of relationship between the fungal partner and the algal partner is a _____.
- (b) In *Vaucheria*, function of haptera is _____.
- (c) Group of plants devoid of distinct root, stem and leaf is called _____.
- (d) Female reproductive structure of *Chara* is known as _____.

- (e) Red rot disease of sugarcane is caused by _____.
- (f) Cell wall of *phytophthora* is mainly made up of _____ and glucan.
- (g) Agar is generally extracted from a group of algae belonging to _____.

2. Define the following terms : 2×4=8

- (a) Hetero-organotrophs
- (b) Fungi imperfecti
- (c) Secondary mycelium
- (d) Coenocytic hyphae

3. Write briefly on any *three* of the following : 5×3=15

- (a) Economic importance of Rhodophyceae
- (b) General characteristics of cryptogams
- (c) Ecological role of fungi
- (d) Asexual reproductions in mucor
- (e) Parasexuality in fungi

(3)

4. Answer any *three* of the following : $10 \times 3 = 30$

(a) Write a comparative account between algae and fungi. Cite suitable examples wherever applicable. 10

(b) Discuss the life cycle of *Agaricus* with suitable diagram. Explain the economic potentiality of *Agaricus* in agriculture. $6+4=10$

(c) "*Anabaena* is studied under the category of both algae and bacteria." Give your justification in this regard. 10

(d) Describe the morphological and reproductive diversity observed in algae. 10

(e) Discuss the trends in classification of plant kingdom in 21st century. 10
