

Roll No.

Total Pages : 3

MDE/D-23

4430

ALGAE & FUNGI

Paper–BOT-101

Time Allowed : 3 Hours]

[Maximum Marks : 80

Note : Attempt **five** questions in all, selecting **one** question from each Unit. Question No. **1** is compulsory. All questions carry equal marks.

Compulsory Question

1. Write short notes on the following : 8×2=16
- (a) Algal blooms
 - (b) Heterocyst
 - (c) Parasexuality
 - (d) Chlamydomonas stage
 - (e) Subaerial and symbiotic algae
 - (f) Karnal Bunt
 - (g) Deterioration of Wood and Timber
 - (h) Asexual spores.

UNIT–I

2. Briefly describe **any two** of the following :
- (a) Important systems for algal classification. 8
 - (b) Economic importance of algae in industries. 8
 - (c) Criteria for algal classification. 8
3. Discuss the thallus organization in major divisions of algae. 16

UNIT–II

4. Write short notes on the following :
- (a) Red tides and algae as major component of phytoplankton. 8
 - (b) Ecological diversity of algae in extreme temperatures. 8
5. Describe life cycle of Xanthophyta or Rhodophyta with suitable examples and well labelled diagram. 16

UNIT–III

6. Describe the concept of heterothallism and parasexuality in Fungi. 16
7. Attempt any **two** of the following :
- (a) Reproduction in Fungi. 8
 - (b) Classification of Fungi by Alexopoulos et al., 1996. 8
 - (c) General account of Zygomycota. 8

UNIT-IV

8. Write causal organism, symptoms and control of **any two** of the following :
- (a) Late blight of Potato. 8
 - (b) Downy mildew of grapes. 8
 - (c) Rust of wheat. 8
9. Describe reproduction and economic value of lichens with suitable examples. 16