

2022
M.Sc.
First Semester
CORE – 01
BOTANY
Course Code: MBOC 1.11
(Microbiology & Algae)

Total Mark: 70
Time: 3 hours

Pass Mark: 28

Answer five questions, taking one from each unit.

UNIT-I

1. Write notes on the following: 7×2=14
 - (a) Criteria for algal classification
 - (b) Reproduction in Chlorophyta
2. Describe the range of thallus organization in algae. 14

UNIT-II

3. Write a note on the following: 7×2=14
 - (a) Types of pigments in algae
 - (b) Food reserves in algae
4. Explain the types of flagellar structures in algae with suitable diagrams. 14

UNIT-III

5. Write notes on the following: 7×2=14
 - (a) Algal ecology
 - (b) Algae as biological monitor of water pollution
6. Write a note on the following: 7×2=14
 - (a) Techniques of culturing algae
 - (b) Symbiotic algal association

UNIT-IV

7. Give an account on the following: 7×2=14
(a) Micro-organisms used in food industry
(b) Gene transfer mechanisms
8. Write notes on the following: 7×2=14
(a) Fermentation and food preservation
(b) Production of antibiotics

UNIT-V

9. Write an account on the following: 7×2=14
(a) Interaction between microbes and roots of higher plants
(b) Biofertilizers
10. Write an account on the following: 7×2=14
(a) Nitrogen fixation
(b) Microbial succession
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