

2023
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 a note on classification of algae and the criteria used. 10+4=14
2. Write notes on the following: 7×2=14
 - (a) Reserve food material in various groups of algae
 - (b) Light harvesting pigments in algae

UNIT-II

3. Write a general account on the thallus organization in algae. 14
4. Write notes on the following: 7×2=14
 - (a) Reproduction in Chlorophyceae
 - (b) Range of thallus organization in Rhodophyceae

UNIT-III

5. Write notes on the following: 7×2=14
 - (a) Use of algae in agriculture
 - (b) Techniques of culturing algae
6. Write a note on the following: 7×2=14
 - (a) Use of algae as environmental indicators
 - (b) Economic importance of algae

UNIT-IV

7. Write an account on the following: 7×2=14
(a) Importance of microorganisms in the production of alcohol
(b) Role of microbes in food spoilage
8. (a) Why do xenobiotic compounds need to be degraded by microorganisms? 7
(b) Give an account on mycotoxins and their harmful effects. 7

UNIT-V

9. Give an account on the importance of microbial succession in our gut and its impact on our health. 10+4=14
10. Give an account on the following: 7×2=14
(a) Various measurement methods of microbial growth
(b) Effect of pH and temperature on microbial growth
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