

Reg. No

Name

25P102

MSc DEGREE END SEMESTER EXAMINATION - NOVEMBER 2025

SEMESTER 1 : BOTANY

COURSE : 24P1BOTT01 : MICROBIOLOGY AND PHYCOLOGY

(For Regular - 2025 Admission and Improvement /Supplementary 2024 Admission)

Duration : Three Hours

Max. Weights: 30

PART A

Answer any 8 questions

Weight: 1

1. Write the function of heterocysts. (E)
2. Illustrate the ultra-structure of flagellum in gram negative bacteria. (U)
3. Differentiate between globule and nucleole. (U)
4. Write a note on the causes of food spoilage. (R)
5. Write the ecological importance of algae. (U)
6. Briefly explain the DNA barcoding in algae. (R)
7. Briefly explain the different stains used in phycology. (U)
8. Write a note on chemolithotroph. (U)
9. Write a note on pyrenoids. (U)
10. Differentiate between viroids and virusoids. (U)

(1 x 8 = 8)

PART B

Answer any 6 questions

Weights: 2

11. Explain the preservation methods of algal samples. (U)
12. Explain the medicinal uses of algae with suitable examples. (E)
13. Give an account on extremophiles (U)
14. Explain the ultrastructure of Grampositive bacteria. (E)
15. Write an account on fossil algae. (An)
16. Discuss the microorganism as source of food. (E)
17. Describe the salient features of Rhodophyceae. (U)
18. Explain paralytic shellfish poisoning. (U)

(2 x 6 = 12)

PART C

Answer any 2 questions

Weights: 5

19. Explain the recombination in bacteria. (An)
20. 'Viruses are chemicals in a test tube but living beings inside the host'. Justify this statement with examples. (E)
21. Write a detailed account on reproduction in algae. (E)
22. Explain the use of algae in SCP and Biofuels. (An)

(5 x 2 = 10)

OBE: Questions to Course Outcome Mapping

CO	Course Outcome Description	CL	Questions	Total Wt.
----	----------------------------	----	-----------	-----------

Cognitive Level (CL): Cr - CREATE; E - EVALUATE; An - ANALYZE; A - APPLY; U - UNDERSTAND; R - REMEMBER;