

M. Sc DEGREE END SEMESTER EXAMINATION - NOVEMBER 2024**SEMESTER 1 : BOTANY****COURSE : 16P1BOTT01 : MICROBIOLOGY AND PHYCOLOGY***(For Supplementary - 2016/2017/2018/2019/2020 Admissions)*

Time : Three Hours

Max. Marks: 75

PART A**Answer any 8 (2 marks each)**

1. What are braun's lipoproteins? What is its significance?
2. What are the probable factors contribute to heat resistance in endospore?
3. What is a reference culture?
4. Name the father of Indian Algology.
5. Name the monograph written by M S Randhawa.
6. What is carposporophyte?
7. Name any two algae that form "blooms".
8. List any two methods of collection for attached algal members.
9. What are the various kinds of food spoilage?
10. Give an account on viral genome.
11. Give an account on T series bacteriophages.
12. Comment on algae as biofertilizer.

(2 x 8 = 16)**PART B****Answer any 7 (5 marks each)**

13. Explain the peculiarities of Chlamydiae.
14. With the help of suitable diagrams explain the ultra- structure of endospore of bacteria.
15. Briefly explain diplobiontic type of life cycle. Give an example.
16. Give an account of the significance of fossil algae.
17. Comment on algae as food, fodder, aquaculture and biofertilizer
18. Explain various types of algal cultures.
19. How microbes are useful in industry?
20. Give a detailed account on disease process by bacteria.
21. Write a short note on morphology of viruses.
22. How do algae help in pollution control and in phycoremediation?

(5 x 7 = 35)**PART C****Answer any 2 (12 marks each)**

23. Write an essay on various culture methods adopted for microorganisms.
24. Describe the major life cycle patterns among the algae.
25. Describe the plastid structure in different groups of algae.
26. Give a general account on classification of viruses. Add a note on viral genome, sub viral particles and their significance.

(12 x 2 = 24)