QP Code: U25DRIS035

Reg. No : .....
Name : .....

ST MARY'S COLLEGE (AUTONOMOUS), THRISSUR-20

I SEMESTER (FYUGP) DEGREE EXAMINATIONS, NOVEMBER 2025
(Regular/Improvement/Supplementary)
B. Sc. Microbiology
MBY1CJ101 : Introduction to Microbiology
2024 Admission Onwards
(Credits: 4)

Time: 2 Hours **Maximum Marks: 70**

Section A

*Answer **all**. Each question carries **3** Marks.* ***(Ceiling: 24 Marks)***

1. Describe about the beneficial impact of microorganisms on plant health.
2. What is the importance of plasmids in bacteria?
3. Explain fluid mosaic model of cell membrane.
4. What is PGPR?
5. Analyze various morphological groups among viruses.
6. What are dimorphic fungi?
7. Demonstrate the structure of the endospore with a labeled diagram.
8. Describe the basic difference between protoplast and spheroplast.
9. Interpret various applications of microbes in pharmaceutical industries.
10. Analyze the concept of biogenesis. How it differ from abiogenesis?

Section B

*Answer **all**. Each question carries **6** Marks.* ***(Ceiling: 36 Marks)***

11. Write about different bacterial forms and arrangements of cells.
12. Name any five pioneers of Microbiology and explain their contributions.
13. Compare the structure of prokaryotic and eukaryotic cells and their differences.
14. Give an overview about the different modes of transmission of diseases.
15. Examine the beneficial role and applications of microorganisms in food industries.
16. Explain the asexual reproduction in fungi.

Turn Over

17. Describe various contributions of Louis Pasteur to the field of Microbiology and explain the concept of spontaneous generation.
18. Give an overview about the mechanism of flagellar movement in bacteria.

Section C

*Answer **any one**. Each question carries **10** Marks.* ***(1x10=10marks)***

19. Explain the structure of bacteriophages. Differentiate lytic and lysogenic cycle in the reproduction of bacteriophages.
20. Outline the use of different microorganisms as biopesticides.

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