QP Code: U25DRIS021

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

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

I SEMESTER (FYUGP/FYVP) DEGREE EXAMINATIONS, NOVEMBER 2025
(Regular/Improvement/Supplementary)
MBY1FM105 : Microorganisms in Daily life
2024 Admission Onwards
(Credits: 3)

Time:1. 5 Hours **Maximum Marks: 50**

Section A

*Answer **All**. Each question carries **2** Marks.* ***(Ceiling: 16 Marks)***

1. What are the factors affecting microbial growth?
2. List down five different types of antibodies and their mode of action.
3. How *Bacillus thuringiensis* finds application as a bio-pesticide?
4. Outline the key ethical issues in the manipulation of Microbial Life.
5. What is bioremediation?
6. Explain the importance of microorganisms in the ecosystem.
7. Identify the importance of quarantine in managing infectious diseases.
8. What an epidemic?
9. Identify various modes of horizontal gene transfer mechanisms in prokaryotes.
10. Compare killed and live vaccines. Give example.

Section B

*Answer **All**. Each question carries **6** Marks.* ***(Ceiling: 24 Marks)***

11. What are differences between prokaryotes and eukaryotes? Give examples.
12. What is antibiotic resistance? Why is it considered as a problem?
13. Compare primary and secondary metabolites and examine the phases in the growth curve where they are produced.
14. Compare the application of genetically modified microorganisms in Industrial Biotechnology and Environmental Biotechnology.
15. Evaluate the significance of Anand Mohan Chakrabarty's "superbug" in the context of oil spill bioremediation.

Turn Over

Section C

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

16. Describe the five major types of microorganisms, listing their defining characteristics and providing one common example for each type.

17. Analyze the various mechanisms by which microorganisms carry out Food spoilage.

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