



24046486

QP CODE: 24046486

Reg No :

Name :

**B.Sc DEGREE (CBCS) IMPROVEMENT/REAPPEARANCE/MERCY CHANCE
EXAMINATIONS, DECEMBER 2024**

First Semester

B.Sc Biotechnology Model III

**Complementary Course - MB1CMT01 - MICROBIOLOGY - FUNDAMENTALS OF
MICROBIOLOGY - I**

2017 Admission Onwards

3F4B6811

Time: 3 Hours

Max. Marks : 60

Part A

*Answer any **ten** questions.*

*Each question carries **1** mark.*

1. What is Microbiology?
2. What is immunology?
3. Name two examples for cocci shaped bacteria.
4. What are phosphate granules ?
5. What is the importance of endospore?
6. What are archaea? Write an example
7. Name the factors affecting the resolving power of a microscope?
8. What is abbe condenser?
9. Name the different lens system of electron microscope.
10. What is simple staining technique?
11. Name any two Special staining techniques.
12. Name two stains used in negative staining.

(10×1=10)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*





13. Differentiate between prokaryotes and eukaryotes.
14. Explain different fields of microbiology.
15. Explain the methods of bacterial classification.
16. Peptidoglycan in bacterial cell wall.
17. Differentiate between bright field and dark field microscopy.
18. Explain principle and working of TEM.
19. Explain Principle and working of SEM.
20. Explain different types of stains based on charge with example.
21. Describe briefly Smear preparation from solid culture and liquid culture.

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **10** marks.*

22. What is microbiology? Explain the different fields of microbiology.
23. Write essay on beneficial and harmful microorganisms.
24. Explain fluorescent microscopy.
25. Write in detail methods used to study bacteria in live condition.

(2×10=20)

