

**Rajiv Gandhi University of Health Sciences, Karnataka**  
**Third Semester B. Pharm Degree Examination – 13-Nov-2024**

**Time: Three Hours**

**Max. Marks: 75**

**PHARMACEUTICAL MICROBIOLOGY**

**Q.P. CODE: 5011**

Your answers should be specific to the questions asked

Draw neat labeled diagrams wherever necessary

All the questions are compulsory

**LONG ESSAYS**

**2 x 10 = 20 Marks**

1. What are disinfectants? Explain the various methods of bacteriostatic evaluation of disinfectants  
**OR**  
Enlist and explain any three methods of cultivations of anaerobes in detail
2. Explain the mode of action, merits and demerits of gaseous sterilizing agents with suitable examples

**SHORT ESSAYS**

**7 x 5 = 35 Marks**

3. Write the differences between prokaryotes and eukaryotes  
**OR**  
Explain the various types of culture media with examples
4. Mode of disinfectant actions of phenols and metallic salts  
**OR**  
Explain the reproduction of fungus
5. Write the significance of biochemical tests. Explain MR-VP tests
6. Explain the microbiological assay of streptomycin by cup plate method
7. Explain the different sources of contamination in aseptic area
8. Define spoilage. Explain the different types of spoilage
9. Explain the different air flow pattern in laminar bench

**SHORT ANSWERS**

**10 x 2 = 20 Marks**

10. State Koch's postulates
11. Lag and log phases in bacterial growth curve
12. Interpretation of sterility testing
13. Examples for Gram's positive and negative bacteria
14. Sterilization indicators
15. Bacteriophage
16. Pasteurization
17. **Define total and viable count**
18. What is secondary cell culture?
19. Direct inoculation

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