

Rajiv Gandhi University of Health Sciences, Karnataka
Third Semester B. Pharm Degree Examination – 13-May-2025

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. Define pure culture and explain the methods used for isolation of pure cultures.
OR
Explain the source, mechanism of sterilization, merit, demerits and applications of sterilization using ethylene oxide.
2. Discuss the evaluation of bactericidal activity of disinfectants.

SHORT ESSAYS

7 x 5 = 35 Marks

3. Differentiate between prokaryotes and eukaryotes
OR
Write a note on cultivation of anaerobic bacteria.
4. Write the procedure, merits and demerits of radiation sterilization.
OR
Write the principle and procedure of Gram staining.
5. Describe steps involved in replication of virus.
6. Describe the sources of contamination in aseptic area and their prevention.
7. Outline the process of assessment of new antibiotics.
8. Discuss the types and sources of spoilage in pharmaceutical products
9. Explain the general requirements for a cell culture laboratory

SHORT ANSWERS

10 x 2 = 20 Marks

10. List the contributions of Louis Pasteur.
11. What is the role of agar in culture media?
12. Name four stains used in microbiology
13. Classify fungi based on morphology.
14. Differentiate between disinfection and antisepsis
15. Explain sterility testing of ophthalmic preparations.
16. Define bacterial growth curve.
17. Name four examples of preservatives in pharmaceutical products.
18. List the signs of microbial contamination in pharmaceutical products
19. Classify viruses.
