

Rajiv Gandhi University of Health Sciences, Karnataka
Third Semester B. Pharm Degree Examination – 02-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. Explain bacteria and its organelles with a neat labelled diagram and give its functions
OR
Explain the morphology of fungus with neat diagram. Add a note in its reproduction
2. Explain the principle, working, merits and demerits of Hot Air oven with neat labelled diagram

SHORT ESSAYS

7 x 5 = 35 Marks

3. Explain the principle and applications of phase contrast microscopy
OR
Explain various sterilization indicators with their importance
4. What is culture media? Give the composition and role of each ingredient used in nutrient broth
OR
Explain the principle involved in Indole production test with its significance
5. Write the principle, mechanism and procedure of gram's staining technique
6. Describe any two methods for cultivations of virus
7. Explain principle involved in microbiological assay of vitamin B₁₂
8. Classify clean area according to British and US standards and give their significance
9. Define microbial spoilage. And add a note on factors affecting the microbial spoilage

SHORT ANSWERS

10 x 2 = 20 Marks

10. Write the contribution of Selman A Waksman
11. Differences between atrichous and peritrichous bacteria
12. Lag and log phases in bacterial growth curve
13. Bacterial spores
14. Ideal properties of disinfectants
15. Mode of actions of aldehydes
16. Define class 100 and 10000
17. Minimum Inhibitory Concentration
18. What is primary cell culture?
19. Basic four requirements for cell culture laboratory
