

Rajiv Gandhi University of Health Sciences, Karnataka

Third Semester B. Pharm Degree Examination – 03-Nov-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 different factors affecting disinfection

OR

Write about importance of microbial preservation technique. Write procedure, merit and demerit of any four preservation techniques

2. Explain the source, mechanism of sterilisation, merit, demerits and applications of sterilization using radiations

SHORT ESSAYS

7 x 5 = 35 Marks

3. Differentiate between prokaryotes and eukaryotes

OR

Explain the different sources and types of microbial contamination of pharmaceuticals

4. Write a note on cultivation of anaerobic bacteria

OR

Explain principle and procedure involved in microbiological assay of vitamin B12

5. Define cell culture, give the merits, demerits and application of cell culture

6. Write about cultivation of virus

7. Describe the construction and working of laminar air flow

8. Write the principle and procedure involved in gram staining

9. Mention indicators used for various sterilization methods

SHORT ANSWERS

10 x 2 = 20 Marks

10. Mention the media used in cell culture
11. What are Rodac plates?
12. Write the principle of sterility testing
13. Write the advantages of autoclaving over hot air sterilization
14. Differentiate between Flagella and Fimbriae
15. What is mycelium?
16. What are cell lines?
17. Mention any four applications of dry heat sterilization
18. Mention arrangement based classification of cocci
19. Define antimicrobial agents. Give two examples
