

Rajiv Gandhi University of Health Sciences, Karnataka
Third Semester B. Pharm Degree Examination – 21-Nov-2022

Time: Three Hours

Max. Marks: 75 Marks

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. Draw an ultra structure of typical bacteria. Write composition and functions of its organelles.

OR

Explain the principle, procedure, applications and demerits and sterilization using hot air oven.

2. Explain different factors affecting disinfectant action.

SHORT ESSAYS

7 x 5 = 35 Marks

3. Write the principle and special feature of phase contrast microscopy.

OR

Write a note on cultivation of anaerobic bacteria.

4. Write the procedure, merits and demerits of sterilisation, add a note on ethylene oxide sterilization.

OR

Explain IMViC tests used for identification of bacteria.

5. Write a note on method used for cultivation of virus.
6. What are the main sources of contamination of an aseptic room? How will you prevent it?
7. Explain principles involved in microbiological assay of Vitamin B₁₂.
8. Explain the preservation of pharmaceutical products using antimicrobial agents.
9. Write briefly on general requirements of cell culture laboratory.

SHORT ANSWERS

10 x 2 = 20 Marks

10. Write contributions of Louis Pasteur.
11. Mention arrangement-based classification of cocci.
12. Electron microscopy
13. Write structure of typical virion.
14. Write the ideal properties of disinfectant.
15. What is direct inoculation method of sterility testing?
16. Write the principle of membrane filtration method of sterility testing.
17. How will you validate HEPA filter?
18. What are the visible changes of microbial contaminations in pharmaceuticals?
19. What is primary cell culture?
