## Rajiv Gandhi University of Health Sciences, Karnataka II Year Pharm-D Degree Examination - 16-May-2025

Time: Three Hours Max. Marks: 70

## PHARMACEUTICAL MICROBIOLOGY (RS & RS2) O.P. CODE: 2857

Your answers should be specific to the questions asked Draw neat, labeled diagrams wherever necessary

## LONG ESSAYS (Answer any two)

 $2 \times 10 = 20 \text{ Marks}$ 

- 1. Differentiate between Gram positive and Gram negative cell wall. Add a note on principle and procedure of Gram's staining technique
- 2. Explain the principle and operating procedure of Industrial autoclave along with a near labelled diagram
- 3. What are disinfectants? Classify and explain their mode of action with examples

## **SHORT ESSAYS (Answer any six)**

 $6 \times 5 = 30 \text{ Marks}$ 

- 4. Write salient feature of differential and selective media along with examples
- 5. Write the procedure, merits and demerits of ethylene oxide sterilization
- 6. Explain the methods to evaluate bacteriostatic activity
- 7. Discuss the microbial assay of cyanocobalamin
- 8. What is immunity? Classify and explain principles of natural immunity
- 9. Explain the methods of sterility testing
- 10. Write a note on AIDS virus
- 11. Explain the life cycle of malarial parasite

SHORT ANSWERS  $10 \times 2 = 20 \text{ Marks}$ 

- 12. Write contributions of Louis Pasteur
- 13. Write bio-indicators for thermal sterilization
- 14. What are haptens?
- 15. What is tyndallization?
- 16. Write the ideal properties of an antiseptic
- 17. What is 'Zone of inhibition'?
- 18. Name the disease caused by fungus
- 19. What is the role of agar in culture media?
- 20. Explain the significance of positive and negative control in sterility testing
- 21. Mantaux test

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