

# Rajiv Gandhi University of Health Sciences, Karnataka

Second year B.Pharm Degree Examination – August 2010

**Time: Three Hours**

**Max. Marks: 80 Marks**

## PHARMACEUTICAL MICROBIOLOGY & BIOTECHNOLOGY (Revised Scheme - 2)

**Q.P. CODE: 1957**

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

### LONG ESSAYS (Answer any Two)

**2 x 10 = 20 Marks**

1. Define and classify sterilization. Explain autoclave and pasteurization techniques
2. Write the production of streptomycin by fermentation method
3. Explain the various methods for determination of total and viable counts of microorganisms

### SHORT ESSAYS (Answer any Eight)

**8 x 5 = 40 Marks**

4. Explain a method for determining MIC of antimicrobial agent
5. What are T and B cell? What is their role in immunity cells?
6. How do you preserve pure culture?
7. Write the principle and procedure of starch hydrolysis test
8. Explain cultivation of anaerobic microorganisms
9. Discuss in detail about bacterial nutrition
10. Write in detail mutation techniques
11. Explain the process of tyndalization
12. Write a note on laminar air flow system
13. Write the principle and procedure for ELISA test

### SHORT ANSWERS

**10 x 2 = 20 Marks**

14. Plasmid and cosmid
15. Ideal characteristics of disinfectant
16. Pharmaceutical applications of monoclonal antibodies
17. What are mixed vaccines? Give two examples
18. Intellectual property rights
19. Spirochetes
20. Selective media
21. Advantages of plate count over direct cell count
22. Difference between bacteria and virus
23. Mechanism of UV sterilization technique

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