

# Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Pharm Degree Examination – Sep 2012

**Time: Three Hours**

**Max. Marks: 70 Marks**

## PHARMACEUTICAL MICROBIOLOGY & BIOTECHNOLOGY (Revised Scheme 3)

**Q.P. CODE: 2607**

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. Write the production and applications of monoclonal anti bodies
2. Write the principle and procedure involved in antibiotic assay of Cephelexin
3. Write the production of penicillin by fermentation method

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

**6 x 5 = 30 Marks**

4. Write the different methods used in isolation of bacteria
5. Write a note on bacteriological analysis of water
6. Write the steps involved in recombinant DNA technology
7. Write the cultivation of anaerobic bacteria
8. Write the validation methods for sterilization
9. Write the principle and procedure involved in flagella staining
10. Nutritional requirement of animal cell culture
11. What are cultures? Explain how pure cultures can be preserved

### **SHORT ANSWERS**

**10 x 2 = 20 Marks**

12. Plasmid and cosmid
13. Treatment of tuberculosis
14. Methods of conversion from toxin to toxoids
15. Radiation Sterilization
16. Simple Staining
17. What is lag time in sterilization?
18. Spirochetes
19. Difference between virus and bacteria
20. Examples of Gram (+) organisms
21. Tyndallization

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