

# Rajiv Gandhi University of Health Sciences, Karnataka

Second year B.Pharm Degree Examination – August 2010

**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. Describe phenol coefficient test. List out its merits and demerits
2. Write the principle and procedure involved in gram staining and acid fast staining with examples
3. Write the production of growth hormone by recombinant DNA technique

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

**6 x 5 = 30 Marks**

4. Write the evaluation of preservatives in pharmaceutical preparations
5. What are sterilization indicators? Explain their uses
6. What are the factors affecting disinfectant activity?
7. Write the applications of monoclonal antibodies
8. Explain techniques of viable count
9. Applications of southern blotting technique
10. Write the principle and procedure of starch hydrolysis test
11. Explain cultivation of anaerobic microorganisms

### **SHORT ANSWERS**

**10 x 2 = 20 Marks**

12. Define sterilization and disinfectant
13. Difference between gram (+) and gram (-) organism cell wall
14. Advantage of plate count over direct cell count
15. Contribution of Louis Pasteur
16. Restriction enzymes
17. Selective media
18. Spirochetes
19. Plasmid
20. Pasteurization
21. Flagella