

# Rajiv Gandhi University of Health Sciences, Karnataka

II Year B. Pharm Degree Examination – JAN-2019

**Time: Three Hours**

**Max. Marks: 70 Marks**

## **PHARMACEUTICAL MICROBIOLOGY AND BIOTECHNOLOGY (Revised Scheme 4)**

**Q.P. CODE: 2631**

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. Mention various antigen-antibody reactions. Discuss in detail the precipitation test. (2+8)
2. Write in detail about agar plate methods of viability counting.
3. Describe the steps involved in sterility testing. Add a note on its merits and demerits. (5+1+4)

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

**6 x 5 = 30 Marks**

4. Write a note on cultivation of virus.
5. Explain the principle involved in autoclaving.
6. Write a note on evaluation of preservatives.
7. Outline production of streptomycin.
8. Explain methods used for isolation of desired gene
9. Write about causative organism, mode of transmission, sign and symptoms and treatment of typhoid.
10. Describe bacterial growth curve.
11. Classify disinfectants giving examples.

### **SHORT ANSWERS**

**10 x 2 = 20 Marks**

12. State Koch's postulates.
13. Differentiate between mordant and decolourising agent.
14. Mention any four gaseous sterilants.
15. Mention applications of UV radiations as a sterilant.
16. Mention media used for sterility testing.
17. How do convert toxins into toxoids?
18. How do you isolate cancer cell from normal cell?
19. Write any four applications of monoclonal antibodies.
20. Mention parts of industrial fermenters along with their role.
21. Differentiate between disinfection and antiseptis.

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