

# Rajiv Gandhi University of Health Sciences, Karnataka

## II Year B.Pharm Degree Examination – 07-Jan-2020

**Time: Three Hours****Max. Marks: 70 Marks**

### **PHARMACEUTICAL MICROBIOLOGY AND 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. Explain morphology and classification of fungi.
2. Discuss the various biochemical tests performed to identify an unknown culture of bacteria.
3. Define sterilization. List the different methods of sterilization with example. Explain sterilization by dry heat.

**SHORT ESSAYS (Answer any Six)****6 x 5 = 30 Marks**

4. Explain the replication of virus.
5. Define disinfection. Write the ideal properties of a disinfectant.
6. What are microbiological assays? Write its advantages and disadvantages.
7. Differentiate between active immunity and passive immunity.
8. Write the mechanism of action and applications of halogens and heavy metals.
9. Discuss various types of mutations.
10. Explain the principle and procedure of ELISA.
11. How is motility of bacteria detected? Explain the ultra structure of flagella.

**SHORT ANSWERS****10 x 2 = 20 Marks**

12. Spore formation.
13. Synchronous growth
14. Negative staining
15. Actinomycetes
16. Media for sterility testing
17. Schick test
18. Toxoid
19. Hapten
20. Acidophiles
21. Chemostat

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