Rajiv Gandhi University of Health Sciences, Karnataka
II Year B.Pharm Degree Examination – Mar 2013

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 the steps involved in the production of Hepatitis B vaccine. What are its safety tests?

2. Enumerate various methods involved in identification of bacteria. Write the principles of the immunological methods to identify bacteria.

3. What are disinfectants, antiseptics & preservatives? What are the factors affecting disinfection? Add a note on phenol coefficient test.

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

4. Write notes on plasmid vector.

5. Describe the factors effecting bacterial growth and survival.

6. Write the characteristics for an ideal sterilizing equipment?

7. What are the differences between DNA & RNA?

8. Describe different phases of growth curve of bacteria based on total count.

9. Enumerate the functions of compliments.

10. Describe asexual reproduction in fungi with the help of diagrams.

11. Discuss Hybridoma technology to produce monoclonal antibodies.

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

12. Write the functions of different components of compound microscope.

13. What is Tuberculin test? How it is carried out?

14. Define the following: Transduction, Conjugation, epitope, & Intron.

15. Principle of the method to carry out sterility testing Benzyl penicillin

16. What is the difference between tyndallization & pasteurization techniques?

17. Define Enriched media with example

18. Write the differences between virulent phage & Temperate phage.

19. Name non-ionizing radiations and their applications as sterilizers.

20. List four methods of genetic transfer in bacteria.

21. Write four important roles played by normal flora of the body.

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