

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Pharm Degree Examination – JAN-2019

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. Explain the different methods of evaluation of bacteriostatic activity of a disinfectant.
2. Write the production of Insulin by rDNA technology.
3. Discuss the technique and nutritional requirement of animal cell culture.

SHORT ESSAYS (Answer any Six)

6 x 5 = 30 Marks

4. What are antigens? Give their classification and characteristics.
5. Write a note on sterilization by radiation.
6. Explain the steps involved in the extraction of penicillin from fermentation broth.
7. Discuss the various non-specific defense mechanisms.
8. Give the differences between gram positive and gram-negative cell wall.
9. How will you perform assay of antibiotics by turbidimetric method.
10. Explain in detail principle and applications of Southern blotting.
11. Explain different types of media used in cultivation of microorganisms.

SHORT ANSWERS

10 x 2 = 20 Marks

12. Viable count of bacteria
13. Phagocytosis
14. Continuous cell line
15. Sanitisation
16. D value
17. Mould and yeast
18. Properties of agar
19. Koch postulates
20. Sugar fermentation test
21. Virulence
