

Rajiv Gandhi University of Health Sciences, Karnataka II Year B. Pharm Degree Examination - 07-Jan-2020

Time: Three Hours Max. Marks: 80 Marks

PHARMACEUTICAL MICROBIOLOGY AND BIOTECHNOLOGY (Revised Scheme - 2) O.P. CODE: 1957

Your answers should be specific to the questions asked. Draw neat labeled diagrams wherever necessary.

LONG ESSAYS (Answer any Two)

 $2 \times 10 = 20 \text{ Marks}$

- 1. Explain identification of bacteria in detail and add a note on nutritional requirement of bacteria.
- 2. Explain in detail production of penicillin by fermentation process.
- 3. Describe various antigen-antibody reactions.

SHORT ESSAYS (Answer any Eight)

 $8 \times 5 = 40 \text{ Marks}$

- 4. Differentiate between synthetic and non-synthetic media. What is selective media?
- 5. Write a note on total and viable count of bacteria.
- 6. Discuss cold sterilization methods.
- 7. Write Chick-Martin phenol co-efficient test.
- 8. Write a note on transduction.
- 9. ELISA test
- 10. Write the methods for anaerobic cultivation of bacteria.
- 11. Tyndallization and Pasteurization
- 12. Write a note on sterility testing.
- 13. Evaluation of bacteriostatics

SHORT ANSWERS $10 \times 2 = 20 \text{ Marks}$

- 14. Plasmids
- 15. Composition of nutrient agar
- 16. Phagocytosis
- 17. Principle of autoclaving
- 18. H & O antigens
- 19. Capsule of bacteria
- 20. Bacteriophage
- 21. Ideal properties of disinfectant
- 22. Protoplast Fusion
- 23. Preparation of inoculum in microbial assays
