

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[BPHARM 0122]

**JANUARY 2022
(MARCH 2021 EXAM SESSION)**

Sub. Code: 2035

B.PHARMACY DEGREE COURSE (SEMESTER EXAMINATIONS)

PCI Regulation 2017 – SEMESTER III

PAPER III - PHARMACEUTICAL MICROBIOLOGY

Q.P. Code: 562035

Time: Three hours

Maximum: 75 Marks

I. Elaborate on: Answer any TWO questions. (2 x 10 = 20)

1. Draw and describe the structure of Bacteria and give the function of each part.
2. Define Disinfectant. Describe factors affecting the choice of Disinfectant.
3. What are different methods of Sterilization? Explain in detail about filtration sterilization and give its applications.

II. Write notes on: Answer any SEVEN questions. (7 x 5 = 35)

1. Differentiate between Gram +ve and Gram –ve bacterial cell.
2. Explain the principles and method of Microbiological assay of Antibiotics.
3. Explain the Bacterial growth curve with a neat diagram.
4. What are enriched, selective, and differential media? Give example for each.
5. Sources of contamination in Aseptic area.
6. Designing of Aseptic area.
7. Preservation of pharmaceutical products.
8. Electron microscopy.
9. Write the preservation methods of pure Culture.

III. Short answers on: Answer ALL questions. (10 x 2 = 20)

1. Differentiate between Slime layer and Capsule.
2. Write the significance of Flagella.
3. Rideal-Walker test.
4. Sporulation.
5. State the reason for using cedar wood oil under 100x objective.
6. D-Value.
7. Acid fast stain.
8. Pasteurization.
9. Bacteriophage.
10. Biological indicators.
