

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

[LR 0121]

JANUARY 2021

Sub. Code: 2035

(MARCH 2020 EXAM SESSION)

B. PHARMACY DEGREE EXAMINATION

PCI REGULATION – 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. Define Sterilization and explain in detail about Sterilization by Radiation and Chemical agents.
2. Discuss Microbiological assay of Antibiotics.
3. Explain the evaluation of Disinfectants.

II. Write notes on: Answer any SEVEN questions.

(7 x 5 = 35)

1. Describe the nutritional requirements and physical conditions required for Bacterial growth.
2. Explain viable count of Bacteria.
3. Explain about the Lytic cycle.
4. Explain in detail about the factors influencing disinfection action.
5. Discuss the different sources of contamination in an Aseptic area.
6. Explain in detail about media used for Animal cell culture.
7. Explain the types of Microbial spoilage.
8. Describe the Gram staining technique with examples.
9. Explain about Sterility indicators.

III. Short answers on: Answer ALL questions.

(10 x 2 = 20)

1. Define Generation time with examples.
2. What is Fumigation?
3. Define Bacteriophage.
4. Give examples for Acid-fast bacteria.
5. Laminar Air Flow.
6. What are the media used for Sterility test?
7. Classify Bacteria based on flagella arrangements.
8. Define Cell line with examples.
9. Give examples of preservatives used for the preparation of pharmaceutical products.
10. What is moist heat sterilization?
