

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

[MD 1022]

OCTOBER 2022

Sub. Code: 2014

**M.D. DEGREE EXAMINATION
BRANCH IV – MICROBIOLOGY**

PAPER I – GENERAL MICROBIOLOGY AND IMMUNOLOGY

Q.P. Code: 202014

Time: Three Hours

Maximum: 100 Marks

I. Essay:

(2 x 15 = 30)

1. Elaborate on the mechanisms of Microbial Pathogenicity.
2. Define and Classify Auto Immune Diseases. Write in detail about the Mechanism of Autoimmunity. Add a note on the laboratory Diagnosis.

II. Short notes:

(10 x 5 = 50)

1. Heat Shock Proteins.
2. Severe Combined Immunodeficiency disorders.
3. Freeze etching Technique.
4. Premunition.
5. Sterilization by Filtration.
6. Mechanisms of Antimicrobial Resistance.
7. Confocal Microscopy.
8. Basal Media.
9. Cancer Immunotherapy.
10. Automated Culture Techniques.

III. Reasoning Out:

(4 x 5 = 20)

1. T cell mediated cytotoxicity is a feature of Transplant rejection.
2. Frei test is Type IV hypersensitivity.
3. Killed vaccines require booster doses.
4. Toll like Receptors mediate Cytokine action.
