

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

[DM 0124]

JANUARY 2024

Sub. Code :1501

D.M. – VIROLOGY

**PAPER – I – BASIC VIROLOGY, BIOETHICS,
RESEARCH METHODOLOGY & VIRAL EPIDEMIOLOGY**

Q.P. Code: 161501

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. Outline the mechanisms of viral pathogenesis. Explain giving appropriate examples.
2. List the different approaches to virus detection with a special mention on the recent advances.

II. Write notes on: **(10 x 7 = 70)**

1. Virus interference.
2. Parametric tests.
3. Host defences against viral infection.
4. Positive sense RNA viruses.
5. Virus quantification methods.
6. Informed consent.
7. Cell lines to propagate viruses.
8. Transmission electron microscope.
9. Hemadsorption.
10. Factors favouring community transmission of viruses.

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

[DM 0225]

FEBRUARY 2025

Sub. Code :1501

D.M. – VIROLOGY

**PAPER – I BASIC VIROLOGY, BIOETHICS, RESEARCH METHODOLOGY
& VIRAL EPIDEMIOLOGY**

Q.P. Code: 161501

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. List the agent that exhibit virus latency. Discuss latency and reactivation of Herpesviridae in detail. Write a note on methods that can be used to detect latent viruses.
2. List the modes of transmission of respiratory viruses. Discuss airborne transmission in detail and outline the methods to study airborne transmission including animal models.

II. Write notes on:

(10 x 7 = 70)

1. ANOVA.
2. Type I and type II error in statistics.
3. Positive selection.
4. Cross-reactive antibodies in Arboviruses.
5. Natural history of virus infection.
6. Helical symmetry.
7. Basic Reproduction Number.
8. Cross-over study design.
9. Ethical considerations in research studies on Pregnant women.
10. ICTV.
