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

[AHS 1022] **OCTOBER 2022** **Sub. Code: 9128**

M.Sc. MOLECULAR VIROLOGY
SECOND YEAR (From 2009-2010 & 2020-2021 onwards)
PAPER I – DIAGNOSTIC VIROLOGY

Q.P. Code : 289128

Time: Three hours **Answer ALL Questions** **Maximum: 100 Marks**

I. Elaborate notes on: **(2 x 20 = 40)**

1. Discuss in detail the spread of SARS – CoV - 2 pandemic. Write in detail the structure, pathogenesis and laboratory diagnosis of the same with a note on vaccine trials.

2. Enumerate the neurotropic viruses. Discuss in detail the structure of Rabies virus along with the pathogenesis and laboratory diagnosis of Rabies infection in humans. Add a note on prophylaxis.

II. Write Short Notes on: **(10x6 = 60)**

1. Zika Virus.
2. Types of cell culture and their maintenance.
3. Arthropod borne viral infections.
4. Haemagglutination inhibition tests.
5. Measles vaccine.
6. Pathogenesis of cancers caused by viruses.
7. Laboratory diagnosis of Hepatitis E infection.
8. Recombination in influenza.
9. Laboratory diagnosis of primary and secondary dengue infection.
10. Pathogenesis of EBV infection.

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

[AHS 1023] **OCTOBER 2023** **Sub. Code: 9128**

M.Sc. MOLECULAR VIROLOGY
SECOND YEAR (From 2020-2021 onwards)
PAPER I – DIAGNOSTIC VIROLOGY

Q.P. Code: 289128

Time: Three hours **Answer ALL Questions** **Maximum: 100 Marks**

I. Elaborate notes on: **(2 x 20 = 40)**

1. Enumerate viruses causing encephalitis in Humans. Discuss the clinical symptoms, transmission, laboratory diagnosis and immunoprophylaxis of Japanese B encephalitis.

2. Write in detail about the structure, pathogenesis, laboratory diagnosis and vaccines against SARS CoV 2. Add a note on containment of SARS Covid 2 pandemic.

II. Write Short Notes on: **(10x6 = 60)**

1. Arthropod borne viral infection.
2. Serological profile of Hepatitis B viral Infection.
3. Slow viral diseases.
4. Varicella zoster virus.
5. Dengue hemorrhagic fever.
6. Structure of influenza virus and vaccines.
7. Kyasanur Forest Disease (KFD).
8. Anti Rabies vaccines.
9. Rota virus and vaccine.
10. Adeno virus.

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

[AHS 1024] **OCTOBER 2024** **Sub. Code: 9128**

M.Sc. MOLECULAR VIROLOGY
SECOND YEAR (From 2020-2021 onwards)
PAPER I – DIAGNOSTIC VIROLOGY

Q.P. Code: 289128

Time: Three hours **Answer ALL Questions** **Maximum: 100 Marks**

I. Elaborate notes on: **(2 x 20 = 40)**

1. Write in detail about the viral encephalitic agents and their clinical features, epidemiology, lab diagnosis and prophylaxis.

2. Write in detail about the structure and replication, epidemiology in India, immunopathogenesis and laboratory diagnosis of Human Immunodeficiency virus (HIV).

II. Write Short Notes on: **(10x6 = 60)**

1. Nipah virus.
2. Polio vaccine strategies in India.
3. Chickungunya.
4. Laboratory diagnosis of Hepatitis B infection.
5. Dengue hemorrhagic fever and Dengue shock syndrome.
6. Rabies prophylaxis.
7. Rubella.
8. Laboratory diagnosis of Covid-19.
9. H1N1 in India.
10. Cytomegalovirus.

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

[AHS 1025] **OCTOBER 2025** **Sub. Code: 9128**

M.Sc. MOLECULAR VIROLOGY
SECOND YEAR (From 2020-2021 onwards)
PAPER I – DIAGNOSTIC VIROLOGY

Q.P. Code: 289128

Time: Three hours **Answer ALL Questions** **Maximum: 100 Marks**

I. Elaborate notes on: **(2 x 20 = 40)**

1. Enumerate the viruses causing Hepatitis in humans. Write in detail about the structure, pathogenesis, clinical disease and laboratory diagnosis of Hepatitis B virus.

2. Describe the structure, pathogenesis, clinical disease and laboratory diagnosis of Influenza virus. Add a note on epidemiology of influenza viral infection.

II. Write Short Notes on: **(10x6 = 60)**

1. Japanese B encephalitis.
2. Polio eradication program.
3. NACO strategies for HIV diagnosis.
4. Oncogenic viruses.
5. Viruses causing diarrhea.
6. Use of mice in diagnostic virology.
7. Methods of cultivation of virus.
8. Pathogenesis and laboratory diagnosis of SARS COV-2 viral infection.
9. Laboratory diagnosis of Dengue infection.
10. 17D vaccine.

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