

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

[AHS 0122]

**JANUARY 2022**

**Sub. Code: 2921**

**(FEBRUARY 2021 & AUGUST 2021 EXAM SESSION)**

**B.Sc. MICROBIOLOGY**

**THIRD YEAR – (Regulation from 2018-2019)**

**PAPER I - DIAGNOSTIC VIROLOGY**

*Q.P. Code : 802921*

**Time: Three hours**

**Answer ALL Questions**

**Maximum: 100 Marks**

**I. Elaborate on:**

**(3 x 10 = 30)**

1. Describe morphology, pathogenesis and laboratory diagnosis of Influenza virus. Add a note on epidemiology.
2. Write in detail about the structure, genomic organisation, serological and molecular diagnosis of Hepatitis B virus.
3. Write about disease burden, clinical course and laboratory diagnosis of Rotavirus.

**II. Write notes on:**

**(8 x 5 = 40)**

1. Role of Humoral and cell mediated immunity and viral factors in development of Dengue Hemorrhagic fever.
2. Neutralisation test
3. Structure and infections caused by Adenovirus
4. Serodiagnosis of HIV
5. Biology and pathogenesis of SARS-Coronavirus
6. Structure and clinical features of Mumps virus
7. Immunoprophylaxis of rabies virus
8. West Nile viral infection

**III. Short answers on:**

**(10 x 3 = 30)**

1. Rhinovirus
2. Name 2 defective virus
3. Killed KFD vaccine
4. Name 3 viruses causing the infections of nervous tissue
5. Eradication and control program for pox virus.
6. Name 3 viruses causing malignancies.
7. Name 2 applications of Electron Microscopy
8. Biosafety cabinet
9. Molluscum contagiosum virus
10. Give 3 examples of viral exanthematous disease.

\*\*\*\*\*