

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

[AHS 0122]

**JANUARY 2022
(OCTOBER 2021 EXAM SESSION)**

Sub. Code: 9130

**M.Sc. MOLECULAR VIROLOGY
SECOND YEAR (From 2009-2010 onwards)
PAPER III – RECENT ADVANCES IN MOLECULAR VIROLOGY
*Q.P. Code : 289130***

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

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

1. List the cancers caused by viruses. Write in detail about the mutations in Hepatitis B Virus, pathogenesis of HBV infection adding a note on its prevention.
2. Enumerate the advanced molecular techniques in virology. Discuss in detail the CRISPR editing technology.

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

1. HCV genotyping.
2. Epitope prediction.
3. mRNA vaccines.
4. Search engine.
5. Transgenic vectors.
6. Types of Public health Surveillance.
7. siRNA.
8. Xenodiagnosis.
9. Microfluidic diffusional sizing.
10. Data mining tools.
