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

[AHS 1022] OCTOBER 2022 Sub. Code: 9127

M.Sc. MOLECULAR VIROLOGY FIRST YEAR (Candidates admitted from 2009-2010 & 2020-2021 onwards) PAPER III – BASIC AND APPLIED VIRAL GENETICS & ENTOMOLOGY

Q.P. Code: 289127

Time: Three hours Answer ALL Questions Maximum: 100 Marks

I. Elaborate notes on:

 $(2 \times 20 = 40)$

- 1. What are prions? Write in detail about the pathogenic mechanisms and diseases caused by them.
- 2. Describe the mechanism of transcription in prokaryotes and how they differ from eukaryotic transcription mechanism?

II. Write Short Notes on:

(10x6 = 60)

- 1. Mutation.
- 2. DNA replication.
- 3. Histones.
- 4. Restriction endonucleases.
- 5. Cell cycle.
- 6. E.coli K 12 strain.
- 7. Prevention and control of Japanese encephalitis.
- 8. Role of mosquitoes in the transmission of dengue and malaria.
- 9. Public health importance of ticks and control measures.
- 10. New world and Old world Sand flies and their importance.
