

MASTER OF SCIENCE (MICROBIOLOGY) (CBCS - 2018 COURSE)
M.Sc. (Microbiology) Sem-III : WINTER- 2022
SUBJECT : VIROLOGY

Day : Tuesday

Time : 02:00 PM-05:00 PM

Date : 27-12-2022

W-25439-2022

Max. Marks : 60

N.B. :

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks.
 - 3) Draw neat and labelled diagram **WHEREVER** necessary.
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Q.1 Describe reproduction of animal viruses using Rabies virus as an example. (15)

OR

Explain in detail science and art of making viral vaccines.

Q.2 a) Diagrammatically explain in detail egg inoculation technique. (08)

b) Discuss morphology, genome organization and life cycle of T- even phage with suitable example. (07)

OR

a) Elaborate what are the effects of viruses on plants. (08)

b) What are Satellites? Explain their replication and pathogenesis. (07)

Q.3 Attempt **ANY THREE** of the following : (15)

- a) Comment on 'Use of viruses that kills superbug'.
- b) Describe harvesting of viral components.
- c) Explain mechanism of Prion infection with suitable examples.
- d) Discuss reproduction of TMV.
- e) Explain the life cycle of λ bacteriophage.

Q.4 Write short note on **ANY THREE** of the following : (15)

- a) Morphological types of viruses.
- b) Immunotherapy.
- c) T₄ R II locus.
- d) Primary cell cultures
- e) Viroids

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