

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

Day : Saturday
Date : 02-07-2022

S-18600-2022

Time : 03:00 PM-06:00 PM
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 the reproduction of animal viruses using Polio virus as an example. **(15)**

OR

Comment on Prion diseases.

Q.2 a) Explain in detail the cultivation of viruses in animal cell culture. **(08)**

b) Discuss transmission of plant infecting viruses through vectors. **(07)**

OR

a) Discuss Satellites and their replication strategies. **(08)**

b) Diagrammatically explain: Lytic and Lysogenic interconversion. **(07)**

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

- a)** Explain diploid cell culture technique.
- b)** Describe capsid symmetry in viruses.
- c)** Explain the effect of viruses on plants.
- d)** Discuss the genome organization and life cycle of T- odd phage with suitable example.
- e)** Discuss the concept of attenuated viral vectors and foreign gene expression.

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

- a)** Types of nucleic acids of viruses
- b)** Benzer's spot test
- c)** Killed viral vaccine
- d)** Viroid
- e)** Adjuvant

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