

M. SC. (MICROBIOLOGY) SEM-IV (C.B.C.S.) (2012 COURSE) :
WINTER - 2017
SUBJECT : VIROLOGY

Day : **Wednesday**
Date : **01/11/2017**

Time : **03.00 PM TO 06.00 PM**
Max. Marks : 60

W-2017-0811

N.B.:

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks.
 - 3) Draw neat and labeled diagrams **WHEREVER** necessary.
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- Q.1** Describe Rabies with reference to following points: [15]
- | | |
|-----------------------|---|
| a) Pathogenesis | d) Control measures |
| b) Mode of infection | e) Importance and administration of vaccine |
| c) Natural reservoirs | |

OR

Describe in detail mapping of the T₄ r II locus.

- Q.2** a) How are plant viruses transmitted to their hosts via different vectors? [08]
- b) Give the use of animals in cultivation of viruses. [07]
- Q.3** Attempt **ANY THREE** of the following: [15]
- a) Give the use of nucleic acid probes in detection and enumeration of viruses.
 - b) Nucleoside analogues are antiviral agents. Explain with suitable example.
 - c) What is the role of transducing phages in virulence of viruses?
 - d) Discuss role of prions in human and animal diseases.
- Q.4** Write short notes on **ANY THREE** of the following: [15]
- a) Viral vectors
 - b) Viroids
 - c) Ribozymes
 - d) Edible vaccines

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