

Code No. 8566

FACULTY OF SCIENCE  
M.Sc. I-Semester Examination, December 2013

Subject: MICROBIOLOGY

Paper – II : Virology

Time: 3 Hours

Max.Marks: 80

Note: Answer all questions from Part-A and Part-B. Each question carries 4 marks in Part-A and 12 marks in Part-B.

**PART – A (8X4 = 32 Marks)**  
**[Short Answer Type]**

1. Cultivation of viruses by embryonated eggs
2. Structure of TMV
3. Lysogenic bacteriophages
4. Ultrastructure of Bacteriophage
5. Phenotypic mixing
6. Adenovirus structure
7. Viral interference
8. Oncogenic viruses

**PART – B (4x12 = 48 Marks)**  
**[Essay Answer Type]**

- 9.(a) Explain the criteria used for classification of viruses.  
OR  
(b) Discuss the replication of cauliflower mosaic virus.
- 10.(a) Describe the life cycle of bacteriophages.  
OR  
(b) Explain the replication of phi X174 in detail.
- 11.(a) Discuss the recombination and multiplicity reactivation of bacterio phages.  
OR  
(b) Draw the replication of any animal virus.
- 12.(a) Write the effect of animal viruses on host cell metabolism.  
OR  
(b) Explain the DNA tumor viruses and their tumorigenesis in detail.

\*\*\*\*