Code No.: 070

FACULTY OF SCIENCE M.Sc. I Semester Examination, November/December 2012 MICROBIOLOGY

Paper – II: (Virology)

Time: 3 Hours]

[Max. Marks: 80

Note: Answer all questions from Section A and B.

SECTION - A

 $(8\times4=32 \text{ Marks})$

Short answer type:

- 1. Detection of viruses
- 2. Structure of TMV
- 3. phi X174
- 4. Lambda phage
- 5. Phenotypic mixing
- 6. Adenovirus structure
- 7. Poxvirus structure
- 8. Interferon.

SECTION - B

 $(4\times12=48 \text{ Marks})$

Essay answer type:

9. a) Explain the criteria used in the classification of viruses.

OR

- b) Discuss various methods used in cultivation of animal viruses.
- 10. a) Write the replication strategies of Lysogenic and lytic bacteriophages.

OR

- b) Draw the ultra structure of T2 bacteriophage with labels and describe the functions of each.
- 11. a) Explain various steps involved in the recombination of phases.

OR

- b) Write the replication of Adenovirus in detail.
- 12. a) Discuss the role of animal viruses on the host cell in relation to infection.

OR

b) Explain the tumorogenesis caused by DNA viruses in the animals.

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