

M.Sc. (Microbiology) (NEP Pattern) Semester-IV
STPG04MCB003 - Virology (VIR)

P. Pages : 1

Time : Three Hours



GUG/S/25/16370

Max. Marks : 80

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- Notes : 1. All questions are compulsory and carry equal marks.
2. Draw well labelled diagrams wherever necessary.

1. Describe in detail nomenclature and ICTV classification of viruses. **16**

OR

- i) Describe structures of enveloped and non-enveloped viruses. **8**
- ii) Describe in detail modes of transmission of viruses. **8**

2. Describe in detail assay of viruses by physical and chemical methods. **16**

OR

- i) Discuss ELISHA and Hemagglutination method. **8**
- ii) Discuss in detail cultivation of viruses using embryonated egg. **8**

3. Describe in brief details life cycle of T4 bacteriophages. **16**

OR

- i) Discuss identification and genomics of plant viruses TMV. **8**
- ii) Discuss in detail transmission of plant viruses. **8**

4. Describe in detail epidemiology, pathogenicity, diagnosis, prevention and treatment of HIV. **16**

OR

- i) Discuss in detail genetic recombinant vaccines. **8**
- ii) Give the account of interferons. **8**

5. Write in short all – compulsory.

- i) Write a note on symmetry of viruses. **4**
- ii) Discuss infectivity assay. **4**
- iii) Give the account of common viral diseases of plants. **4**
- iv) Write on antiviral drugs. **4**
