

# C.U.SHAH UNIVERSITY

## Summer Examination-2019

Subject Name : Elective-II (Virology)

Subject Code : 5SC04VIR1

Branch: M.Sc. (Microbiology)

Semester : 4

Date : 18/04/2019

Time : 02:30 To 05:30

Marks : 70

**Instructions:**

- (1) Use of Programmable calculator and any other electronic instrument is prohibited.
  - (2) Instructions written on main answer book are strictly to be obeyed.
  - (3) Draw neat diagrams and figures (if necessary) at right places.
  - (4) Assume suitable data if needed.
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### SECTION – I

**Q-1                      Attempt the Following questions                      (07)**

- |           |   |           |
|-----------|---|-----------|
| <b>a.</b> | Write down the Examples of plant viruses (any three)            | <b>01</b> |
| <b>b.</b> | Write down any two difference between lytic and lysogenic cycle | <b>01</b> |
| <b>c.</b> | Causative agent of Hepatitis B                                  | <b>01</b> |
| <b>d.</b> | Define : radioactivity tracers                                  | <b>01</b> |
| <b>e.</b> | Full form of PSTVd  | <b>01</b> |
| <b>f.</b> | Write down the name of antiviral drugs (any two)                | <b>01</b> |
| <b>g.</b> | Application of Bacteriophage (any two)                          | <b>01</b> |

**Q-2                      Attempt all questions                      (14)**

- |           |   |           |
|-----------|---|-----------|
| <b>a)</b> | Write down in detail: ELISA                                 | <b>07</b> |
| <b>b)</b> | Life cycle and structural organization of M13 bacteriophage | <b>07</b> |

**OR**

**Q-2                      Attempt all questions                      (14)**

- |           |  |           |
|-----------|--|-----------|
| <b>a)</b> | Briefly discuss on: structure , life cycle ,symptoms ,transmission and control of Cauliflower Mosaic Virus | <b>07</b> |
| <b>b)</b> | Prepare a short note on: Viral Vaccines  | <b>07</b> |

**Q-3                      Attempt all questions                      (14)**

- |           |   |           |
|-----------|---|-----------|
| <b>a)</b> | Write down about: structure , life cycle, symptoms, and management papaya ring spot | <b>07</b> |
| <b>b)</b> | Explain: interferons antiviral drug   | <b>07</b> |

**OR**

**Q-3 a)** Write down about: structure , life cycle, symptoms, and management tomato yellow leaf curl **07**



- b) Write TMV's structure propagation ,purification life cycle , prevention **07**

## SECTION – II

**Q-4 Attempt the Following questions (07)**

- a. Define: oncogene **01**
- b. Write down any two examples of viroid disease. **01**
- c. Define : pathogenicity **01**
- d. Draw the structure of Bacteriophage **01**
- e. What is Haemagglutination inhibition? **01**
- f. What is complement fixation? **01**
- g. Full form of TMV **01**

**Q-5 Attempt all questions (14)**

- a) Write Short note on: discovery of viruse **07**
- b) Write down in detail: structure , lifecycle, replicative strategies , epidemiology ,pathogenicity and diagnosis of orthomyxoviruse **07**

**OR**

**Q-5**

- a) Briefly introduce: hepatitis **07**
- b) Prepare a note on: HIV **07**

**Q-6 Attempt all questions (14)**

- a) What is animal viruse? Write down the structure and lifecycle of T<sub>3</sub> animal viruses **07**
- b) Discuss: Viral cultivation **07**

**OR**

**Q-6**

**Attempt all Questions**

- a) Write down in detail: lambda P1 **07**
- b) Briefly explain: infectivity assay **07**

