

**Roll No.**

**Total No. of Pages : 02**

**Total No. of Questions : 09**

**B.Sc. Honours (Microbiology) (Sem.-3)**

# VIROLOGY

**Subject Code : BSMB-301-19**

**M.Code : 90367**

**Date of Examination : 12-12-22**

**Time : 3 Hrs.**

**Max. Marks : 60**

**INSTRUCTIONS TO CANDIDATES :**

1. **SECTION-A** is **COMPULSORY** consisting of **TEN** questions carrying **TWO** marks each.
2. **SECTION-B** contains **FIVE** questions carrying **FIVE** marks each and students have to attempt any **FOUR** questions.
3. **SECTION-C** contains **THREE** questions carrying **TEN** marks each and students have to attempt any **TWO** questions.

## SECTION-A

**1. Write briefly :**

- a) Draw T4 Phage structure.
- b) Name the stages of infection.
- c) What is SV40 virus?
- d) Difference between enveloped and non-enveloped virus.
- e) What are the salient features of wound tumor virus?
- f) What are interferons?
- g) Write down general principle of viral vaccination.
- h) What is capsid symmetry?
- i) What is host specific defence mechanism?
- j) Write down application of phages.

### **SECTION-B**

2. What is infection? Write down various stages of Infection.
3. Write down the replication pattern of Rhabdo Virus.
4. Broadly explain Lambda Temperate phage with Structure, Lytic & Lysogenic cycle.
5. Write down the origin of viruses with its general properties.
6. What are anti-viral compounds and explain their mode of action?

### **SECTION-C**

7. Classify Viruses. Explain the isolation, purification and cultivation of viruses.
8. Draw the life-cycle and replication strategies of Hepatitis Virus.
9. Briefly discuss following:
  - a. What are Interferons?
  - b. Write down the general principles of Viral Vaccination.

**NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.**