JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -2 EXAMINATION-2022

M.Sc. I Semester (Microbiology)

COURSE CODE (CREDITS): 20B1WBI831 MAX. MARKS: 25

COURSE NAME: Virology

COURSE INSTRUCTORS: Ashok Kr. Nadda MAX. TIME: 1 Hour 30 Min

Note: *All questions are compulsory. Marks are indicated against each question in square brackets.*

Section I

Q1. **Very short answer type questions.**

a) During the life cycle of viruses, in which stage viruses are most sensitive towards antiviral agents? (1 mark)

b) Which microscopy technique can be used for the morphological study of virus? (1 mark)

c) How does the spike play an important role in SFV replication? (1 mark)

d) What are the applications of ELISA in virology? (1 mark)

e) Which microscopy technique can be used for the morphological study of virus? (1 mark)

Section II

Q 2. Illustarte the latent period in the growth curve of virus with the help of suitable diagram? (2 marks)

Q 3. Discuss different morphological forms of plant viruses with at least one example from each category? (2 marks)

Q 4. Explain the various routes of cultivation of virus in embryonated egg with the help of diagram? What are the various difficulties encountered during virus cultivation? (2 marks)

Q 5. How plant viruses are released from cell to cell and move systematically within the plant? (2 marks)

Q 6 With help of a flow diagram elucidate the reproduction strategies of viruses having following type of genomes i) +ssRNA ii) –ssRNA iii) RNA viruses that reverse transcribe. (2 marks)

Section III

Q 7 Enlist the various steps involved in direct and indirect fluorescence methods for virus study. (3 marks)

Q 8 How does the enveloped and Non enveloped viruses differs during the entry, assembly and release of the viral progeny in the host cell. Give a detailed account with labeled diagram. (4 marks)

Q 9. Write a comprehensive note on taxonomic groups of plant viruses, demarcating criteria specified by International Committee on Taxonomy of Viruses (ICTV). How plant viruses (species) and genera are named. (3 marks)