JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -2 EXAMINATION- 2023

M.Sc.-I Semester (Microbiology)

COURSE CODE (CREDITS): 20B1WBI831 (02)

MAX. MARKS:25

COURSE NAME: Virology

COURSE INSTRUCTORS: Ashok Kumar Nadda

MAX. TIME: 1.5 Hours

Note: (a) All questions are compulsory.

- (b) Marks are indicated against each question in square brackets.
- (c) The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems

Section I

Q 1 Very short answer type questions

- a) What are the tertiary binding tests used for the study of viruses? [Mark 1]
- b) Write the examples of viruses that can be cultivated by Yolk sac inoculation. [Mark 1]
- c) What are the major advantages of cell culture of viruses? [Mark 1]
- d) Amantidine is one of the antiviral drugs that can block the uncoating of virus? Name the virus against which amantidine can be used. [Mark 1]
- e) Give the example of protease inhibitor that inhibits the late protein synthesis and processing? [Mark 1]

Section II

- Q 2 Discuss the various routes of inoculation of viruses inside the animal models. Give suitable examples. [Marks 3]
- Q.3 Write in detail about the replication of non enveloped viruses. [Marks 3]
- Q 4 Give an account on cultivation of viruses by tissue culture and cell culture techniques. Explain with the help of a suitable example. [Marks 4]

Section III

- Q 5 Why mice are the common animal model used in the virus study. Discuss their advantages [Marks 3]
- Q 6 Write a short note on Ouchterlony [Marks 3]
- Q 7 Discuss the various primary binding tests used for the study of viruses. Explain direct and indirect ELISA with the help of a suitable diagram [Marks 4]