

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATION- 2023

M.Sc.-I Semester (Microbiology)

COURSE CODE (CREDITS): 20B1WBI831 (02)

MAX. MARKS: 15

COURSE NAME: Virology

COURSE INSTRUCTORS: Ashok Kumar Nadda

MAX. TIME: 1 Hour

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*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*

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**Section I**

**Q 1 Very short answer type questions**

- a) What are the susceptible and permissive cells? How do these differ from each other?  
(Mark 1)
- b) Write the examples of Group I & Group II viruses and their examples. (Mark 1)
- c) What are the major oncogenic viruses that cause cancer in human beings? Explain with example. (Mark 1)
- d) What is the genetic material present in Coronavirus and Togaviruses? (Mark 1)
- e) ) Give the example of viruses with single stranded RNA with non segmented genome?  
(Mark 1)

**Section II**

**Q 2 Write in detail about the morphology and ultra structure of the virus. (2.5 marks)**

**Q 3 Give an account on cultivation of viruses on embryonated eggs. Explain with the help of a suitable example. (2.5 marks)**

**Section III**

**Q 4 Discuss briefly about one step growth curve of bacteriophages. Describe in detail each phase of the life cycle of the virus with the help of a diagram. (2.5 marks)**

**Q 5 Give a detailed description of entry, multiplication, assembly and release of an enveloped virus. (Mark 2.5)**