

Seat No.	
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B.Sc. (Part-III) Semester-V (CBCS)**Examination, March 2024.****MICROBIOLOGY****Virology (Paper-IX)****Sub. Code : 79708****Day and Date: Tuesday, 26-03-2024****Total Marks: 40****Time: 10.30 a.m. to 12.30 p.m.**

- Instructions:**
- 1) All questions are compulsory.
 - 2) Figures to the right indicate full marks.
 - 3) Draw neat and labelled diagrams wherever necessary.

Q.1 Rewrite the following sentences by choosing correct alternative. (8)

- 1) Small circular RNA molecules having no capsid or envelope associated with certain plant diseases are
(A) virus (B) prion ~~(C) viroid~~ (D) interferon
- 2) The basic structural unit of capsid is known as
~~(A) capsomer~~ (B) icosamer (C) heptamer (D) trimer
- 3) Cancer originating in epithelial tissues is called
(A) carcinoma (B) lymphoma ~~(C) sarcoma~~ (D) leukemia
- 4) Genome of adenovirus has
(A) palindromic ends (B) ~~cohesive ends~~
(C) inverted terminal repeats (D) redundant ends
- 5) Precipitation of virus is carried out using
~~(A) ammonium sulphate~~ (B) calcium sulphate
(C) sodium sulphate (D) potassium sulphate

- 6) Lysis of bacteria by bacteriophages gives rise to a clear, circular area in a layer of cells, known as
 (A) pock (B) plague (C) plaque (D) phage
- 7) Protovirus theory was proposed by
 (A) Temin (B) Lederberg
 (C) Jacob and Monad (D) Watson and Crick
- 8) During lysogenic interaction, lambda phage genome gets integrated in between genes of *E.coli*.
 (A) gal and bio (B) Pro A and Pro B
 (C) his and bio (D) Pro A and gal

Q.2 Attempt ANY TWO.

(16)

- 1) Describe in brief isolation and cultivation of animal viruses using tissue culture.
- 2) Describe multiplication of tobacco mosaic virus.
- 3) Give different types of cancers and enlist the characteristics of cancer cells.

Q.3 Write short notes. (Any four)

(16)

- 1) One step growth curve
- 2) Structure of T4 bacteriophage
- 3) HIV structure
- 4) Latex droplet method
- 5) Replication of adenoviral DNA
- 6) Oncogene theory