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BTECH
(SEM VIII) THEORY EXAMINATION 2021-22
VIROLOGY

Time: 3 Hours**Total Marks: 70****Note: 1.** Attempt all Sections. If require any missing data; then choose suitably.**SECTION A**

- 1. Attempt all questions in brief. 2 x 7 = 14**

a.	Define virus.
b.	What do you understand of purification of virus?
c.	Define viral infection.
d.	What is a macromolecule?
e.	Define antiviral.
f.	What are ribozymes?
g.	What do you mean by pathogen?

SECTION B

- 2. Attempt any three of the following: 7 x 3 = 21**

a.	What do you mean by isolation of virus and components? Discuss.
b.	How virus affect on host macromolecules? Discuss.
c.	What do you mean by Flavi viruses? Discuss in detail with some example of such viruses?
d.	Write a note on the dsRNA viruses with some example.
e.	Discuss the QA/QS issues in large scale manufacturing of vaccines.

SECTION C

- 3. Attempt any one part of the following: 7 x 1 = 7**

(a)	Write a note on history of viruses.
(b)	Discuss about the shapes, sizes of viruses.

- 4. Attempt any one part of the following: 7 x 1 = 7**

(a)	Discuss virus counterattack mechanisms. Explain with some example.
(b)	Describe any viral diagnostic technique in detail.

- 5. Attempt any one part of the following: 7 x 1 = 7**

(a)	Write a note on positive stand viruses. How are these identified?
(b)	Write a note on SARS family of viruses.

- 6. Attempt any one part of the following: 7 x 1 = 7**

(a)	Write a note on the following: (i) negative stand viruses, (ii) Retroviruses: HIV.
(b)	Describe the reverse transcription in detail.

- 7. Attempt any one part of the following: 7 x 1 = 7**

(a)	What do you mean by DNA vaccines? Discuss.
(b)	Write a note on modern approaches of virus control.