

PD-179

M.Sc. Microbiology

First Semester Examination Dec.-2020

Paper –Second

(Virology)

Time: Three hours

[Maximum Marks:80]

[Minimum Marks: 29]

Note: Answer from the Sections as directed. The figures in the right-hand margin indicate marks .

Section-A

Q-1 Answer the following question- (1X 10 Marks)

- a. What does (+) and (-) strand RNA mean?
- b. What is MOI?
- c. What is quasiequivalence?
- d. Name of viral proteins are involved in DNA replication?
- e. Name of two disinfectant is effective against viruses.
- f. Full name of SARS and MERS
- g. Two examples of Double-stranded DNA virus
- h. Name of largest and smallest virus?
- i. Capsomers is subunit of ?
- j. An icosahedral capsid consists of

Q-2 Answer in the following questions- (2X 5= 10 Marks)

- a. What is the Baltimore system? What does it tell us?
- b. What is cytopathic effect? Name two examples.
- c. How does a viral growth differ from bacterial growth?
- d. Write a functions of surface protein of influenza virus?
- e. Difference between Corona virus and Influenza virus

Section -B

Answer the following questions: questions – (4X15=60 Marks)

Unit-I

3. Explain viral Capsid and Envelope and its, structure and functions

OR

Write short notes on the following;

- (a) Type of viral genome
- (b) Principal of viral pathogenicity

Unit-II

4. Main characteristics of plant virus and their classification

OR

Write short notes on the following;

- (a) What is lambda phage DNA?
- (b) Difference between a virulent phage and a temperate phage?

Unit-III

5. Write about retroviruses, structure, and replication.

OR

Write short notes on the following;

- (a) Pharyngoconjunctival
- (b) Role of Oncogenic virus

Unit-IV

6. Explain eclipse and latent period cycle and its similarities.

OR

Write short notes on the following;

- (a) Similarities and dissimilarities of lytic and Lysogenic cycle
- (b) Life cycle of Cynophages