

(20518)

Roll No.

B. Sc. (Micro.)-I Year**3486****B. Sc. (Micro.) Examination, May 2018****Virology****(B-103)***Time : Three Hours]**[Maximum Marks : 50*

Note : Answer any Five questions. All questions carry equal marks.

1. Describe the structure and function of capsid and envelopes in viruses. 10

2. Define viruses. Enumerate their general characteristics and discuss their chemical nature. 10

3. What are bacteriophages ? Who was the first to discover them ? Explain the fine structure of T_4 bacteriophage. 10

(2)

Describe the lytic cycle of DNA bacteriophages. 10

5+5

Write short notes on the following :

- (a) Methods for culturing viruses
- (b) Cyanophages.

5+5

Write short notes on the following :

- (a) Human immunodeficiency virus
- (b) Prions.

✓ Describe the methods of transmission of viruses in plants. 10

3. Write in brief about the classification of viruses adopted by PCNV. 10

✓ Write short notes on the following : 5+5

- (a) Role of viruses in biotechnology
- (b) Tobacco mosaic disease.

0. Give a brief account of type of viruses with emphasis on their morphology. 10

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P.T.O.

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Roll No. 169796814.

B.Sc. (Micro.) - I Yr

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B.Sc. (Micro.) Examination, May 2017

VIROLOGY

(B-103)

Time : Three Hours / Maximum Marks : 50

Note : Attempt any **five** questions. **All** questions carry equal marks.

1. What are bacteriophages? Describe in brief their structure and mode of replication. 10

2. Write short notes on any **two** : $5 \times 2 = 10$

- (i) HIV
- (ii) POX virus
- (iii) Polio virus

3. What are viroids? Describe in details their structure, nature and importance. 10

P.T.O.

4. Write in brief on the following : $5 \times 2 = 10$

- (i) Retrovirus
- (ii) TMV

5. Write short notes on the following : $5 \times 2 = 10$

- (i) Biological nature of viruses
- (ii) Prions

6. Give a brief account of transmission of plant viruses. 10

7. Write brief notes on the following :

$$5 \times 2 = 10$$

- (i) Nomenclature of viruses
- (ii) General characters of virus

8. Discuss briefly the role of viruses as disease causing agent. 10

9. Write short notes on any two : $5 \times 2 = 10$

- (i) T-Todd phage
- (ii) Dysogenic cycle

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(iii) Symptoms of virus infection in plants

10. Give a brief account of the following :
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$$5 \times 2 = 10$$

- (i) Replication of DNA viruses
- (ii) Classification of viruses

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Roll No.

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Total Questions : 10]

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B.Sc. (Micro.) 1st Year Examination,
May-2019

VIROLOGY

(B-103)

[B.Sc. (Micro)]

Time : 3 Hrs. / 1 M.M. : 50

Note :- Attempt any five questions. All questions carry equal marks.

1. What are Viruses ? Give general characteristics of viruses. 10
2. Give a general account of structure of viruses. 10
3. Describe symptoms of viral diseases in plants and methods of control of viral plant diseases. 10

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(1)

Turn Over

4. Describe the nature of genetic material in viruses. 10
5. Which type of bacteriophages exhibit lytic cycle ?
Describe the lytic cycle of DNA bacteriophages. 10
6. What are Viroids ? Name diseases caused by
Viroids. 10

7. Write short notes on the following :

- (a) Pox virus
(b) Retro virus 5,5

8. Write short notes on the following :

- (a) Human Immunodeficiency Virus

- (b) Polio Virus 5,5

9. Give an account of methods of culturing and
techniques of purification of viruses. 10

10. Write short notes on the following :

- (a) Cyanophages
(b) Prions 5,5

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(20524) Roll No.
B.Sc. (Micro)-I Year.

3486

B.Sc. (Micro.) Examination, May-2024

VIROLOGY

(B-103)

[B.Sc.(Micro)]

Time : 3:00 Hours / Maximum Marks : 50

Note : Attempt any **five** questions. **All** questions carries equal marks.

1. Explain in detail the nature & importance of viroids and Prions.
2. What are viruses and how do they differ from other pathogens?
3. Name and explain few diseases of International importance caused by viruses and viroids.
4. Explain in detail about structure of bacteriophages with a diagram.

P.T.O.

5. Write about classification of viruses.
6. Write in detail about the structure of following:
 - (a) Human Immunodeficiency virus
 - (b) Pox virus
7. Write a detailed note on TMV (Tobacco Mosaic Virus).
8. Write in detail about the replication of ssDNA virus.
9. Describe the following terms:
 - (a) Vision
 - (b) Capsid
 - (c) Nucleocapsid
 - (d) Virus
 - (e) Capsomere
10. Describe in detail about the role of viruses in biotechnology.