

Exam Date & Time: 30-Sep-2020 (10:00 AM - 01:45 PM)



## PSG COLLEGE OF ARTS AND SCIENCE

Note: Writing 3hrs: Checking & Inserting Image : 30mins + Grace Time : 15mins

**BSc DEGREE EXAMINATION MAY 2020**  
(Sixth Semester)

**Branch - MICROBIOLOGY**  
**VIROLOGY [14MBU27]**

Marks: 75

Duration: 225 mins.

### SECTION A

Answer all the questions.

- 1) Contagium virum fluidum. (2)
- 2) Symmetry of virus. (2)
- 3) CAM. (2)
- 4) PFU. (2)
- 5) Lysogeny. (2)
- 6) Eclipse. (2)
- 7) Arboviruses. (2)
- 8) Cytocidal infection. (2)
- 9) Mycoviruses. (2)
- 10) Prions. (2)

### SECTION B

Answer all the questions.

- 11) Explain the role of viral envelope in pathogenesis. (5)
  - a)
- [OR] Draw a neat labeled structure of virus. (5)
  - b)
- 12) Explain the technique of nanofiltration for the purification of viruses. (5)



- a)  
[OR] Explain Hemagglutination assay. (5)  
b)
- 13) Explain in detail the rolling circle of replication of phage DNA. (5)
- a)  
[OR] Discuss the life cycle of ? phage. (5)  
b)
- 14) Briefly outline oncogenic viruses. (5)
- a)  
[OR] What are the enzymes involved in the replication of animal viruses. (5)  
b)
- 15) List out the properties of insect viruses. (5)
- a)  
[OR] Differentiate between animal viruses and plant viruses. (5)  
b)

### SECTION C

**Answer 3 out of 5 questions.**

- 16) Write an essay about properties of viruses. (10)
- 17) Explain in detail the methods involved in the purification of virus. (10)
- 18) Explain the steps involved in lytic cycle of T4 phage. (10)
- 19) Describe the replication and transcription of RNA viruses. (10)
- 20) Briefly outline the general properties of viroids. (10)

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