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**DHANALAKSHMI SRINIVASAN COLLEGE  
OF ARTS & SCIENCE FOR WOMEN  
(AUTONOMOUS)**

(For Candidates admitted from 2020-2021 onwards)



**PG DEGREE EXAMINATIONS APRIL - 2021**

**M.Sc., - MICROBIOLOGY**

**ADVANCED VIROLOGY**

**Time: 3 Hrs**

**Max.Marks: 75**

**PART - A**

**CHOOSE THE CORRECT ANSWER**

**(10X1=10)**

1. Viruses range in size from
  - a) 1 – 100 nm
  - b) 25 – 300 nm
  - c) 10 - 100µm
  - d) 1 – 10 µm
2. Which component present in all viruses.
  - a) Envelope
  - b) DNA
  - c) Capsid
  - d) Tail fibres
3. Viruses are
  - a) Obligate intracellular parasites
  - b) May divide by binary fission
  - c) Have their own metabolism
  - d) None of the above
4. Which of the following is the first step in replication by bacteria phases?
  - a) absorption
  - b) Penetration
  - c) transcription
  - d) assembly and release
5. Which of these infections agents do not have nucleic acid?
  - a) Varroids
  - b) Viruses
  - c) bacteria
  - d) Prions
6. Which is the most common type of biological vector of human disease?
  - a) Viruses
  - b) bacteria
  - c) Mammals
  - d) arthropods
7. Which of the following is a helical virus?
  - a) TMV
  - b) T4 phage
  - c) Poxvirus
  - d) Herpes virus
8. Viral genome inserted to the bacterial DNA is termed as \_\_\_\_\_
  - a) Lysogeny
  - b) Prophage
  - c) Lytic cycle
  - d) Virulent phage
9. What is Corona virus?
  - a) It is a large family of viruses
  - b) It belongs to the family of Lido virus
  - c) Both A & B are correct
  - d) Only A is correct
10. The First case of Novel Corona Virus was identified in
  - a) Beijing
  - b) Shanghai
  - c) Wuhan Hubei
  - d) Tianjin

**PART- B**

**ANSWER ALL THE QUESTIONS**

**(5X7=35)**

11. a) Give an account on Chemical Composition of Viruses

**(OR)**

b) Draw the structure & morphology characterises of Viruses

12. a) Illustrate the replication of virus.

**(OR)**

b) Briefly explain the viral host interaction.

13. a) List out the importance of cell lines.

**(OR)**

b) Comment on gene delivery for viruses.

14. a) Draw the structure and functions of Bacteriophages.

**(OR)**

b) Difference between M13 and Mu phages.

15. a) Write a brief note on clinical diagnosis of EBOLA.

**(OR)**

b) How to prevent corona virus? Explain.

**PART-C**

**ANSWER ANY THREE QUESTIONS**

**(3X10=30)**

16. Describe the lifecycle of TMV.

17. Discuss about classification of viruses.

18. Give a detail notes on virus cellular interactions.

19. Write an essay on Tumour viruses.

20. Describe the Lifecycle and clinical diagnosis of HIV with suitable diagram.