

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION DECEMBER 2018
(Sixth Semester)

Branch - **MICROBIOLOGY**

VIROLOGY

Time : Three Hours

Maximum : 75 Marks

SECTION-A (20 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** marks (10 x 2 = 20)

- 1 Define Nucleocapsid.
- 2 Expand ELISA.
- 3 What is prophage?
- 4 Define reverse transcriptase.
- 5 Define my cophage.
- 6 What is uncoating?
- 7 Define a plaque.
- 8 What is an eclipse period?
- 9 What are prions?
- 10 Viriod.

SECTION - B (25 Marks!)

Answer **ALL** Questions

ALL Questions Carry **EQUAL** Marks (5 x 5 = 25)

- 11 a Write a short note on general properties of viruses.
OR
b Write a note on Viral composition and its significance.
- 12 a Write a note on cultivation of viruses in embryonated eggs and its detection.
OR
b Explain various methods of viral purification.
- 13 a Explain in detail about the applications of phages.
OR
b Explain the rolling circle replication of phages.
- 14 a Explain various transcription mechanisms in DNA viruses.
OR
b Write a note on cytolysis and pathogenicity of viruses.
- 15 a Write in detail about the plant viral replication.
OR
b Write a note on viruses of fungi and algae.

SECTION - C (30 Marks)

Answer any **THREE** Questions

ALL Questions Carry **EQUAL** Marks (3 x 10 = 30)

- 16 Write in detail about the various steps of viral replication with a suitable diagram.
- 17 Explain cultivation of viruses in animals and cell cultures.
- 18 Write a note on various methods used in diagnosis.
- 19 Write a note on replication of DNA viruses and explain transcription.