

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION DECEMBER 2019
(Sixth Semester)

Branch - **MICROBIOLOGY**

VIROLOGY

Time : Three Hours

Maximum : 75 Marks

SECTION-A 120 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** marks (10x2 = 20)

- 1 Virion.
- 2 Capsomers.
- 3 Cytopathic effect.
- 4 LD 50 & CC50.
- 5 Binal symmetry.
- 6 Concatemer.
- 7 Naked viruses.
- 8 EBV.
- 9 inclusion bodies.
- 10 Prions.

SECTION - B (25 Marks)

Answer **ALL** Questions

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

- 11 a Write an account on the general structural properties of viruses.
OR
b What are peplomers? What function they serve in virus life cycle (With reference to influenza virus proteins).
- 12 a Give four major approaches by which viruses may be purified. Describe how each works.
OR
b Write an account on various virus Assays.
- 13 a Describe in detail the reproduction on single stranded DNA phages.
OR
b Describe lysogenic conversion and its significance.
- 14 a Write a note on penetration & uncoating in DNA viruses.
OR
b Describe the role of viruses in development of cancer.
- 15 a Describe in what way does a prion differ from viruses and viloids.
OR
b Describe about viruses that infect higher fungi and algae .

SECTION - C 130 Marks)

Answer any **THREE** Questions

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

- 16 Describe the major technical advances in the early development of virology.
- 17 Discuss the ways in which viruses may be cultivated.
- 18 Write an account on the one step growth experiment. Summarize what oculus in each phase of the reselling growth curve.
- 19 Summarize the Replication & Transcription in RNA viruses.
- 20 Describe how plant viruses are transmitted between hosts.

Z-Z-Z

END