

**M. SC. (Microbiology) SEM-IV (C.B.C.S.) (2012 COURSE) : WINTER  
- 2018**

**SUBJECT: MICROBIOLOGY: VIROLOGY**

Day : Friday  
Date : 19/10/2018

**W-2018-1029**

Time: 03.00 PM TO 06.00 PM  
Max. Marks: 60.

---

**N.B.:**

- 1) All questions are **COMPULSORY**.
  - 2) Figures to the **RIGHT** indicate full marks.
  - 3) Draw neat labeled diagrams **WHEREVER** necessary.
- 

**Q.1** Describe pathogenesis, pattern of infection and control measures for poliomyelitis. (15)

**OR**

Give the significance of Icosahedral and helical symmetry in viral structure determination.

**Q.2** a) Compare between live attenuated polio virus vaccine and killed polio virus vaccine. (08)

b) Justify: Ribozymes are antiviral agents. (07)

**Q.3** Attempt any **THREE** of the following: (15)

- a) Diagrammatically explain different routes of egg inoculation for virus cultivation.
- b) Justify: Virus genome exists in different forms.
- c) Explain recombinant DNA vaccines.
- d) Explain use of PCR in virus detection.

**Q.4** Write short notes on any **THREE** of the following: (15)

- a) Indicator plants
- b) Prions
- c) Nucleoside analogues
- d) LD<sub>50</sub>/ ID<sub>50</sub>/ EID<sub>50</sub>/ TCID<sub>50</sub>

\* \* \*