[LD 1013] OCTOBER 2013 Sub. Code: 9127

M.Sc MOLECULAR VIROLOGY EXAMINATION FIRST YEAR

(for Candidates admitted from 2009-2010 onwards) PAPER III – BASIC AND APPLIED VIRAL GENETICS

Q.P. Code: 289127

Time: 3 hours Maximum: 100 marks

Answer ALL questions

I. Elaborate on : (2X20=40)

1. Describe Viral oncogenes. Discuss mechanisms of viral oncogenesis.

2. What are prions? Explain their structure and significance.

II. Writes notes on: (10X6=60)

- 1. Catabolic repression
- 2. Evolutionary significance of histoproteins
- 3. Write a short notes on:
 - a) Spliceosomes
 - b) Polyadenylation
- 4. Nucleic acid based classification of viruses
- 5. Elaborate features of DNA polymerase
- 6. Explain transcription initiation in prokaryotes
- 7. Describe constituents of nucleosome and chromatin structures
- 8. Explain the replication of Polio and influenza viruses
- 9. Procession of primary transcripts in to mature mRNA
- 10. Replication mechanism of S V 40 virus.
