

R09

Code No: C0302

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

M.Tech I Semester Examinations, March/April 2011

MOLECULAR BIOLOGY AND VIROLOGY

(BIOTECHNOLOGY)

Time: 3hours

Max. Marks: 60

**Answer any five questions
All questions carry equal marks**

- - -

1. Explain the steps involved in DNA replication. [12]
2. Mention the different classes of RNA & their functions. [12]
3. Briefly describe transcription process in eukaryotes. [12]
4. Comment on.
a) CPG islands
b) Disruption of RNA structure & capping [12]
5. Write about the molecular mechanism of anti sense RNA in gene regulation. [12]
6. Write short notes on
a) Transposable elements [6]
b) Retro viruses in transformation [6]
7. What are ribozymes? Explain the strategies for designing ribozymes? [12]
8. Explain in detail the replication of bacteriophages. [12]
