

R09

Code No: C0302

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

M.TECH I SEMESTER EXAMINATIONS, APRIL/MAY 2012

MOLECULAR BIOLOGY AND VIROLOGY

(BIOTECHNOLOGY)

Time: 3hours

Max. Marks: 60

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

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1. Explain the synthesis of ribosomal RNA molecule and its processing in eukaryotes.
2. Describe the negative and positive control of gene expression in prokaryotes.
3. Briefly describe the process of Protein synthesis in prokaryotes.
4. Comment on
 - a) Repetitive DNA
 - b) Plasmids
5. Explain eukaryotic translational control.
6. Enumerate the applications of antisense and ribozyme technologies.
7. Write short on
 - a) Morphological categories in viruses.
 - b) SV_{40} in transformation
8. Explain the replication of animal viruses.
