

CODE NO: RR222305

2008 JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY

**II B.TECH II SEMESTER SUPPLIMENTARY EXAMINATIONS
MOLECULAR BIOLOGY
(BIO-TECHNOLOGY)**

AUG/SEP 2008

**TIME:3HOUR
MARK:80**

ANSWER ANY FIVE QUESTIONS ALL QUESTIONS CARRY EQUAL MARKS .

MARK [16*5=80]

1. What were the features of the DNA molecule described by Watson and Crick? Are these features the same for all DNA molecules?
2. compare conservative, semiconservative and dispersive modes of DNA replication.
3. What are the general principles underlying all splicing mechanisms?
4. Why would isoleucine be less likely to occur in a beta turn than in a beta strand?
5. Contrast and compare the mutagenic effects of deaminating agents, alkylating agents and base analogous.
6. Write a note on molecular structure of eukaryotic gene.
7. Describe the mechanism of transformation process.
8. Outline the steps involved in the replication of a lytic bacteriophage.