

CODE NO: RR 21306

2006 JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY

II B.TECH I SEMESTER REGULAR EXAMINATIONS

GENETICS

(BIO-TECHNOLOGY)

NOVE 2006

TIME:3 HOUR
MARK:80

ANSWER ANY FIVE QUESTIONS ALL QUESTIONS CARRY EQUAL MARKS

1. Mendel crossed pea with Wrinkled, Yellow seeds. All F₁ plants had seeds that were Round and Yellow. Predict the results of test crossing them F₁ plants.
2. The function ascribed to the genetic material are replication, expression, storage, and mutation. What does each of these terms mean?
3. Two genes can be coupling or repulsion phase on a parental chromosome. What is the difference between the two?
4. Describe the conditions under which genetic recombination may occur in bacterio- phage?
5. Write a note on structure and organization of Lampbrush chromosomes.
6. Contrast and compare the mutagenic effects of deaminating agents, alkylating agents and base analogous.
7. Define lyon hypothesis.
8. What is kappa in Paramecium?