

CODE NO: R050212304
SET NO. 1

2007 JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY

II B.TECH I SEMESTER REGULAR EXAMINATIONS
GENETICS
(BIO-TECHNOLOGY)

NOVEMBER 2007

MAX MARKS: 80
TIME: 3 HOURS

Answer any FIVE Questions
All Questions carry equal marks

1. *What is meant by Epitasis? Explain citing suitable examples. [16]*
2. *Write notes on:*
 - (a) *Histones & Non-Histones*
 - (b) *Heterochromatin & Euchromatin. [8+8]*
3. *What are HFr strains? Discuss their importance in conjugation. [16]*
4. *With respect to gene mapping explain the following terms:*
 - (a) *Interference & Coefficient of coincidence*
 - (b) *Gene order & gene distance. [16]*
5. *Write the importance of Giant chromosomes in Drosophila. [16]*
6. *Describe the conjugation between F- and Hfr strains. [16]*
7. *What is Marylon hypothesis ? Write in detail. [16]*
8. *Differentiate between extra nuclear and nuclear inheritance.*