

R07**Code: R7212305**

B.Tech II Year I Semester (R07) Supplementary Examinations, May 2013

GENETICS
(Biotechnology)

Time: 3 hours

Max. Marks: 80

Answer any FIVE questions
All questions carry equal marks

1. Describe the inheritance of a quantitative trait with suitable examples.
2. Explain in detail the nucleosome solenoid model of DNA packing.
3. Describe the mechanism of transduction process.
4. Describe as to how a three – point testcross is used for recombination mapping.
5. What is karyotyping? What it is used in relation to diseases?
6. Explain the mechanism of plasmid transfer during conjugation between an F^+ donor and F^- recipient.
7. Write short notes on the following:
 - (a) Down's syndrome.
 - (b) Turner's syndrome.
8. What do you mean by extra chromosomal inheritance? Write an example how it transfers to next generation.
