Code: R7312304

R7

III B.Tech I Semester(R07) Supplementary Examinations, May 2011 GENETIC ENGINEERING

(Biotechnology)

Time: 3 hours Max Marks: 80

Answer any FIVE questions All questions carry equal marks

- 1. Discuss the regulatory components of the lac operon system.
- 2. What does gene amplification mean? How is it different from gene duplication?
- 3. What properties do plasmids confer on their host cells?
- 4. Comment on the following:
 - (a) Vectors that are useful for DNA sequencing.
 - (b) Vectors used for construction of genomic libraries.
- 5. What is the difference between Southern and Northern blotting techniques?
- 6. Discuss about multiplex PCR.
- 7. Write short notes on any two:
 - (a) AFLP
 - (b) VNTR sequences
 - (c) Gene chip
- 8. Comment on:
 - (a) Ex vivo gene therapy
 - (b) In vivo gene therapy.
