

R09

Code: 9A23504

B.Tech III Year I Semester (R09) Supplementary Examinations December 2015

GENETIC ENGINEERING

(Biotechnology)

Time: 3 hours Max Marks: 70

> Answer any FIVE questions All questions carry equal marks

- 1 Explain the process of gene regulation in Prokaryotes.
- 2 Describe the role of promoters and enhancers in gene regulation.
- 3 Define vectors. Write about plasmid vectors.
- 4 Write about various enzymes involved in genetic engineering.
- 5 Explain the mechanism of DNA sequencing in detail.
- Describe the PCR methodology elaborately 6
- 7 Explain the gene chip and microarray techniques in detail.
- Define gene therapy. Explain it with an example. 8