Code: R7412311

R7

IV B.Tech I Semester (R07) Supplementary Examinations, May 2012
METABOLIC ENGINEERING
(Biotechnology)

Time: 3 hours Max Marks: 80

Answer any FIVE questions
All questions carry equal marks
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1. Write short notes on:
   (a) Co metabolism during Bioconversion.
   (b) Feedback regulation.

2. Write in detail about the regulation of enzyme synthesis at Fermentor level.

3. Outline a strategy for the selection of induced mutants synthesizing improved levels of primary metabolites. How is it different from the methods involving secondary metabolic production?

4. Explain mixed or sequential bioconversions with suitable examples.

5. Describe induction / repression phenomena in E.coli with examples.

6. Discuss the experimental methods for the determination of metabolic flux.

7. Give the importance of metabolic control in the production of r-DNA product.

8. Discuss the recent trend in metabolic engineering for quantitative improvements.

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