Code No: C0303

## JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD M.TECH I SEMESTER EXAMINATIONS APRIL/MAY-2012 GENERAL AND INDUSTRIAL MICROBIOLOGY (BIOTECHNOLOGY)

Time: 3hours Max.Marks:60

## Answer any five questions All questions carry equal marks

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- 1. Explain in detail about Theory and practice of various sterilization techniques.
- 2. Write short note on the following
  - a) Theory of Biogenesis
  - b) Germ theory of Diseases
  - c) Enrichment culture methods
- 3. Explain in detail about the factors influencing carbon and nitrogen sources in media formulation.
- 4. What is medium optimization? Explain different methods employed for medium optimization briefly explaining about Response Surface Methodology.
- 5. Define fermentation. Explain in detail about different parts and their significance that we use for the manufacturing of a fermentor with neat schematic diagram.
- 6. Explain about large scale production of Citric acid.
- 7. Discuss Industrial production of B Vitamin in detail.
- 8. Describe in brief about Biofertilizers and their applications.

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