

Code No: RR322304

RR

Set No. 2

III B.Tech II Semester Examinations, December 2010  
BIOPROCESS ENGINEERING - II  
Bio-Technology

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions  
All Questions carry equal marks

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1. Explain the design and operation of a CSTR with a neat labeled diagram? [16]
2. Discuss in detail the basic components of a digital computer. [16]
3. What are the two models employed for sterilization of media in industry and explain about them? [16]
4. Discuss different enzymes which are used for manipulating DNA. [16]
5. Discuss in detail the sequential parameter estimation for a simple batch fermentation. [16]
6. Discuss in detail about growth cycle phases for batch cultivation. [16]
7. Outline the methods employed for measuring Chemical process parameters and explain about them? [16]
8. What is meant by Multiphase bioreactors ? Explain in detail about any two Multiphase bioreactors ? [16]

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Set No. 4

III B.Tech II Semester Examinations, December 2010  
BIOPROCESS ENGINEERING - II  
Bio-Technology

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions  
All Questions carry equal marks

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Set No. 1

III B.Tech II Semester Examinations, December 2010  
BIOPROCESS ENGINEERING - II  
Bio-Technology

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions  
All Questions carry equal marks

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Set No. 3

III B.Tech II Semester Examinations, December 2010  
BIOPROCESS ENGINEERING - II  
Bio-Technology

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions  
All Questions carry equal marks

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2. Discuss different enzymes which are used for manipulating DNA. [16]
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4. Explain the design and operation of a CSTR with a neat labeled diagram? [16]
5. Discuss in detail about growth cycle phases for batch cultivation. [16]
6. What are the two models employed for sterilization of media in industry and explain about them? [16]
7. What is meant by Multiphase bioreactors ? Explain in detail about any two Multiphase bioreactors ? [16]
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