

Code No: R05412304

R05

Set No. 2

IV B.Tech I Semester Examinations, November 2010

DOWNSTREAM PROCESSING

Bio-Technology

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks

1. Describe the mode of operation of super critical fluid extraction .Give a neat sketch of the block diagram. What are the advantages of super critical fluid in the extraction operation? [16]
2. Discuss the steps involved in the product isolation and purification of penicillin production. [16]
3. Describe electrophoresis separation methods. [16]
4. Write in detail about the precipitation methods based on solvent property modification. [16]
5. Write about Bioaffinity chromatography and how to reduce non specific interactions in affinity chromatography. [16]
6. (a) What are protein inclusion bodies? How are they converted to native proteins?
(b) What is cell permeabilization? What is its use? [16]
7. Discuss membrane filtration with respect to different types of membranes and different configurations of membrane separation equipment. [16]
8. Discuss about the Important steps involved in downstream processing for butanol production. [16]

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R05**Set No. 4****IV B.Tech I Semester Examinations, November 2010****DOWNSTREAM PROCESSING****Bio-Technology****Time: 3 hours****Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

1. (a) What are protein inclusion bodies? How are they converted to native proteins?
(b) What is cell permeabilization? What is its use? [16]
2. Describe the mode of operation of super critical fluid extraction. Give a neat sketch of the block diagram. What are the advantages of super critical fluid in the extraction operation? [16]
3. Describe electrophoresis separation methods. [16]
4. Write about Bioaffinity chromatography and how to reduce non specific interactions in affinity chromatography. [16]
5. Discuss membrane filtration with respect to different types of membranes and different configurations of membrane separation equipment. [16]
6. Discuss the steps involved in the product isolation and purification of penicillin production. [16]
7. Write in detail about the precipitation methods based on solvent property modification. [16]
8. Discuss about the Important steps involved in downstream processing for butanol production. [16]

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R05

Set No. 1

IV B.Tech I Semester Examinations, November 2010

DOWNSTREAM PROCESSING

Bio-Technology

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks

1. Discuss about the Important steps involved in downstream processing for butanol production. [16]
2. (a) What are protein inclusion bodies? How are they converted to native proteins?
(b) What is cell permeabilization? What is its use? [16]
3. Describe electrophoresis separation methods. [16]
4. Describe the mode of operation of super critical fluid extraction .Give a neat sketch of the block diagram. What are the advantages of super critical fluid in the extraction operation? [16]
5. Discuss membrane filtration with respect to different types of membranes and different configurations of membrane separation equipment. [16]
6. Discuss the steps involved in the product isolation and purification of penicillin production. [16]
7. Write about Bioaffinity chromatography and how to reduce non specific interactions in affinity chromatography. [16]
8. Write in detail about the precipitation methods based on solvent property modification. [16]

Code No: R05412304

R05

Set No. 3

IV B.Tech I Semester Examinations, November 2010

DOWNSTREAM PROCESSING

Bio-Technology

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks

1. Discuss membrane filtration with respect to different types of membranes and different configurations of membrane separation equipment. [16]
2. Write in detail about the precipitation methods based on solvent property modification. [16]
3. Write about Bioaffinity chromatography and how to reduce non specific interactions in affinity chromatography. [16]
4. Discuss the steps involved in the product isolation and purification of penicillin production. [16]
5. Discuss about the Important steps involved in downstream processing for butanol production. [16]
6. (a) What are protein inclusion bodies? How are they converted to native proteins?
(b) What is cell permeabilization? What is its use? [16]
7. Describe electrophoresis separation methods. [16]
8. Describe the mode of operation of super critical fluid extraction .Give a neat sketch of the block diagram. What are the advantages of super critical fluid in the extraction operation? [16]
