Code No: R05312302 **R05** **Set No. 2**

III B.Tech I Semester Examinations,November 2010
BASIC INDUSTRIAL BIOTECHNOLOGY
Bio-Technology

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. Describe the following:
   (a) Working stock culture.
   (b) Primary stock cultures.
   (c) Lyophilized cultures. [5+5+6]
2. Write the importance of agricultural raw materials in the production of various primary metabolites with regard to production economics? [10+6]
3. Briefly write a historical overview of industrial fermentation process. [16]
4. Discuss in detail the downstream processing methods used in the production of aromatic compounds? [16]
5. Briefly discuss the following:
   (a) Alkaline proteases.
   (b) Fungal amylases.
   (c) Recombinant proteins. [5+6+6]
6. Indicate the importance of feed back inhibition in bioproduct production with examples? [12+4]
7. Give detailed account of polyhydroxybutarate production by microbial system starting from glucose as carbon source? [16]
8. Write short notes on:
   (a) Difference between vaccine and antibody.
   (b) Immune response and vaccines.
   (c) Disease control by vaccination. [4+6+6]

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Code No: R05312302 **R05** **Set No. 4**

III B.Tech I Semester Examinations,November 2010
BASIC INDUSTRIAL BIOTECHNOLOGY
Bio-Technology

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

⋆ ⋆ ⋆ ⋆ ⋆

1. Briefly write a historical overview of industrial fermentation process. [16]
2. Discuss in detail the downstream processing methods used in the production of aromatic compounds? [16]
3. Give detailed account of polyhydroxybutarate production by microbial system starting from glucose as carbon source? [16]
4. Write the importance of agricultural raw materials in the production of various primary metabolites with regard to production economics? [10+6]
5. Indicate the importance of feed back inhibition in bioproduct production with examples? [12+4]
6. Describe the following:
   (a) Working stock culture.
   (b) Primary stock cultures.
   (c) Lyophilized cultures. [5+5+6]
7. Briefly discuss the following:
   (a) Alkaline proteases.
   (b) Fungal amylases.
   (c) Recombinant proteins. [5+6+6]
8. Write short notes on:
   (a) Difference between vaccine and antibody.
   (b) Immune response and vaccines.
   (c) Disease control by vaccination. [4+6+6]

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Code No: R05312302 **R05** **Set No. 1**

III B.Tech I Semester Examinations,November 2010
BASIC INDUSTRIAL BIOTECHNOLOGY
Bio-Technology

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. Indicate the importance of feed back inhibition in bioproduct production with examples? [12+4]
2. Write the importance of agricultural raw materials in the production of various primary metabolites with regard to production economics? [10+6]
3. Describe the following:
   (a) Working stock culture.
   (b) Primary stock cultures.
   (c) Lyophilized cultures. [5+5+6]
4. Write short notes on:
   (a) Difference between vaccine and antibody.
   (b) Immune response and vaccines.
   (c) Disease control by vaccination. [4+6+6]
5. Briefly write a historical overview of industrial fermentation process. [16]
6. Give detailed account of polyhydroxybutarate production by microbial system starting from glucose as carbon source? [16]
7. Briefly discuss the following:
   (a) Alkaline proteases.
   (b) Fungal amylases.
   (c) Recombinant proteins. [5+6+6]
8. Discuss in detail the downstream processing methods used in the production of aromatic compounds? [16]

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Code No: R05312302 **R05** **Set No. 3**

III B.Tech I Semester Examinations,November 2010
BASIC INDUSTRIAL BIOTECHNOLOGY
Bio-Technology

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) Difference between vaccine and antibody.
   (b) Immune response and vaccines.
   (c) Disease control by vaccination. [4+6+6]
2. Briefly write a historical overview of industrial fermentation process. [16]
3. Give detailed account of polyhydroxybutarate production by microbial system starting from glucose as carbon source? [16]
4. Briefly discuss the following:
   (a) Alkaline proteases.
   (b) Fungal amylases.
   (c) Recombinant proteins. [5+6+6]
5. Write the importance of agricultural raw materials in the production of various primary metabolites with regard to production economics? [10+6]
6. Indicate the importance of feed back inhibition in bioproduct production with examples? [12+4]
7. Discuss in detail the downstream processing methods used in the production of aromatic compounds? [16]
8. Describe the following:
   (a) Working stock culture.
   (b) Primary stock cultures.
   (c) Lyophilized cultures. [5+5+6]

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