

Code No: RR210804

RR

Set No. 2

II B.Tech I Semester Examinations, November 2010

INORGANIC CHEMICAL TECHNOLOGY

Chemical Engineering

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions  
All Questions carry equal marks

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1. Write in detail the chemical reactions occur in the furnace of Glass manufacturing with temperatures. [16]
2. (a) Discuss about the radioactive nature of Radium?  
(b) Discuss about its applications? [10+6]
3. (a) What are the various fields of chemical engineering in which a chemical engineer is employed  
(b) Explain the material balances, energy changes and energy balances in chemical process industries. [8+8]
4. Explain briefly about
  - (a) Sorel cement
  - (b) Blast furnace slag cement
  - (c) Role of Gypsum
  - (d) Coloured cement [4x4]
5. Explain the production of high - purity gaseous oxygen from air using the cryogenic process with a flowsheet. [16]
6. (a) What are the special features and functions of a refractories as engineering materials?  
(b) Write notes on silicon carbide refractory. [8+8]
7. (a) Mention the engineering problems involved in the crystallization process employed for the water conditioning.  
(b) Explain the Reverse osmosis process employed for the separation of water from brine. [8+8]
8. (a) Explain the production of ammonium nitrate with a flow diagram.  
(b) What are the uses of ammonium nitrate? [12+4]

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Set No. 4

II B.Tech I Semester Examinations, November 2010

INORGANIC CHEMICAL TECHNOLOGY

Chemical Engineering

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions  
All Questions carry equal marks

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(b) Write notes on silicon carbide refractory. [8+8]
2. Explain the production of high - purity gaseous oxygen from air using the cryogenic process with a flowsheet. [16]
3. (a) Mention the engineering problems involved in the crystallization process employed for the water conditioning.  
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6. Write in detail the chemical reactions occur in the furnace of Glass manufacturing with temperatures. [16]
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8. Explain briefly about
  - (a) Sorel cement
  - (b) Blast furnace slag cement
  - (c) Role of Gypsum
  - (d) Coloured cement [4x4]

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Set No. 1

II B.Tech I Semester Examinations, November 2010

INORGANIC CHEMICAL TECHNOLOGY

Chemical Engineering

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions  
All Questions carry equal marks

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1. (a) Discuss about the radioactive nature of Radium?  
(b) Discuss about its applications? [10+6]
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(b) Explain the Reverse osmosis process employed for the separation of water from brine. [8+8]
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8. (a) What are the special features and functions of a refractories as engineering materials?  
(b) Write notes on silicon carbide refractory. [8+8]

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Code No: RR210804

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Set No. 3

II B.Tech I Semester Examinations, November 2010

INORGANIC CHEMICAL TECHNOLOGY

Chemical Engineering

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions  
All Questions carry equal marks

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1. Explain the production of high - purity gaseous oxygen from air using the cryogenic process with a flowsheet. [16]
2. (a) What are the various fields of chemical engineering in which a chemical engineer is employed  
(b) Explain the material balances, energy changes and energy balances in chemical process industries. [8+8]
3. Write in detail the chemical reactions occur in the furnace of Glass manufacturing with temperatures. [16]
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