18CH35

USN ☐☐☐☐☐☐☐☐☐☐

Third Semester B.E. Degree Examination, June/July 2023
Chemical Technology - I

Time: 3 hrs.　　　　　　　　　　　　　　　　　　　　　Max. Marks: 100

Note: *Answer any FIVE full questions, choosing ONE full question from each module.*

Module-1

1　Explain in detail any four method of Softening of water.　　　　　**(20 Marks)**

OR

2　a. What are the causes of hardness of water?　　　　　　　　　**(05 Marks)**
　　b. Write the disadvantages of hard water.　　　　　　　　　　**(05 Marks)**
　　c. What are the different types of Compressors? Explain any one in deail.　　**(10 Marks)**

Module-2

3　With a neat flowchart, explain in detail about the production of O2 and N2 by Lindi's Double Column method.　　　　　　　　　　　　　　　　　　**(20 Marks)**

OR

4　a. With a neat flow chart, explain about the Production of Sulfuric Acid. Highlight the major Engineering problems encountered.　　　　　　　　　　**(14 Marks)**
　　b. Write the advantages and disadvantages of the Catalyst used.　　**(06 Marks)**

Module-3

5　With a neat flow chart, explain in detail about the production of Soda Ash by Solvay process. High light the major Engineering problems encountered.　　**(20 Marks)**

OR

6　a. How Cement is classified? Explain.　　　　　　　　　　　　**(06 Marks)**
　　b. With a neat flow chart, explain in detail about the production of Portland Cement. Highlight the major Engineering problems.　　　　　　　　　**(14 Marks)**

Module-4

7　With a neat flow chart, explain about the production of urea by Ammonium Carbonate Decomposition method. Highlight the major Engineering Problems Encountered.　**(20 Marks)**

OR

8　With a neat flow chart, explain in detail about　:
　　a. Super Phosphate　　　　　　b. Triple Super Phosphate.　　**(20 Marks)**

Module-5

9　a. What are the raw materials required for the manufacture of Glass?　　**(10 Marks)**
　　b. Write in detail about the manufacture of Glass.　　　　　　**(10 Marks)**

OR

10　a. With a neat flow chart, explain about the Production of Zno.　　**(10 Marks)**
　　b. Write in detail about the Constituents of Paints.　　　　　　**(10 Marks)**

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