



Science and Humanities Department

Vision: “To excel in the field of technology by creating technocrats with value based professionalism.”

Mission:

M1:- To provide technical expertise to fulfill the needs of industry.

M2:- To impact ethical values and professional responsibilities.

M3:- To achieve excellence in academics.

Subject Name: Applied Chemistry

Date: - 10/03/2023

Assignment No:-1

Course Outcome: Select the relevant metallurgical process related to industrial applications.

Topic Name: - Metal, alloys, cement & Refractories

1. Write the chemical reaction taking place during setting & hardening of cement.
2. Why Duralumin sheets are used in making aeroplanes body?
3. What are the constituents of copper matte?
4. “All minerals are not ore but all ores are minerals”. Explain.
5. Write the reaction of smelting process of copper.
6. Explain Bio cement with advantages.
7. Explain setting and hardening of lime.
8. Explain the following properties of refractories
 - a. Thermal Expansion
 - b. Thermal Conductivity
 - c. Chemical inertness
 - d. Electrical Conductivity
 - e. Mechanical Strength

Date Of submission: 14/03/2023

Assign By: Mrs. Y.D.Wasu



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Subject Name: Applied Chemistry

Date: - 14/04/2023

Assignment No:-2

Course Outcome: Use relevant water treatment process to solve Industrial Problems

Topic Name: - Water Treatment and Analysis

Q:-1 Define the Following

- a. Hard and Soft Water
- b. Hardness of water
- c. Caustic Embrittlement
- d. Scales and Sludge
- e. Temporary and Permanent Hardness
- f. Reverse Osmosis

Q:-2. List any two limitations of Zeolite Process

Q:-3 Write the Principle of Ion Exchange Process

Q:-4 What are the Characteristics of Potable Water?

Q:-5 Name the Methods of Sterilization and write the Principle of Chlorination.

Q:-6 How Cation Exchange Resins are regenerated?

Q:-7 Define BOD & COD

Q:-8 What is Waste Water? How can It Be recycled?

Date Of submission: 17/04/2023

Assign By: Assign By: Mrs. Y.D.Wasu



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Subject Name: Applied Chemistry

Date: - 28/04/2023

Assignment No:-3

Course Outcome: Use Relevant Fuel in Relevant Application.

Topic Name: - Fuels and Combustion

Q:-1 Define The following

A. Calorific Value

b. Ignition Temperature

c. Coalification Process

d. Cracking and Knocking

e. Refining Of Petroleum

Q:-2 Write the criteria for selection of a good Fuel

Q.3:-What is Proximate and Ultimate Analysis?

Q:-4 List the Parts of Bomb Calorimeter

Q:-5 Write Composition of Biogas

Q:-6 Write the Composition of Liquefied Petroleum Gas.

Q:-7 What is CNG and Biogas

Q:-8 Progressive Transformation of wood to coal shows what? Explain

Date Of submission: 8/05/2023

Assign By: Assign By: Mrs. Y.D.Wasu