

## **PART-A**

1. What is reference electrode?.
2. Write any two uses of dry cell.
3. What is calcination?
4. Define gangue.

## **PART-B**

5(a). The standard reduction potentials of Zn and Cu electrodes are -0.76 volts and + 0.34 volts respectively. Calculate the emf of the cell  $\text{Zn} / \text{Zn}^{+2} // \text{Cu}^{+2} / \text{Cu}$ .

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5(b). Describe the standard hydrogen electrode.

6(a). What is the composition of Nichrome? Write any two uses.

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6(b). Explain Electromagnetic separation method of concentration of ore.

## **PART-C**

7(a). Distinguish between electrolytic cell and galvanic cell (any five).

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7(b). Define electrochemical series. Explain its significance.

8(a). Explain extraction of Iron from Hematite using flow chart

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8(b). Explain extraction of Aluminium from bauxite using flowchart.