ATOMIC ENERGY CENTRAL SCHOOL-KUDANKULAM

Worksheet –Module-4/4
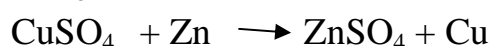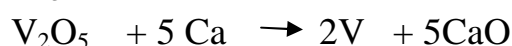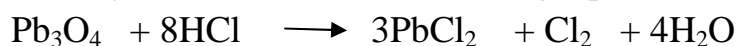
Subject-Chemistry **Class-X**

Lesson No.- Chapter 1- Chemical Reactions and Equations

Name of the topic – Redox Reaction

Total Marks =8x3=24

1. Basic principle of corrosion of rusting is redox reaction. Explain the statement by giving equation.
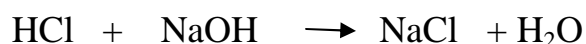
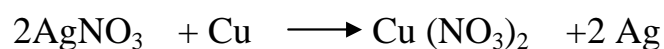2. Identify the oxidant in the following equations

   $Pb_3O_4 + 8HCl \longrightarrow 3PbCl_2 + Cl_2 + 4H_2O$

   $V_2O_5 + 5 Ca \longrightarrow 2V + 5CaO$

   $CuSO_4 + Zn \longrightarrow ZnSO_4 + Cu$

3. Identify the reducing agent in the following reactions-

   $Fe_2O_3 + 3CO \longrightarrow 2Fe + 3CO_2$

   $H_2O + F_2 \longrightarrow HF + HOF$

   $4NH_3 + 5O_2 \longrightarrow 4NO \quad 6H_2O$
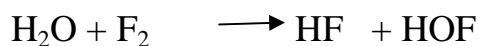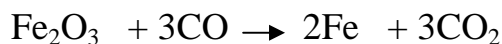
   4. Identify the substance undergoing oxidation and reduction in the following equations-

   $2AgNO_3 + Cu \longrightarrow Cu (NO_3)_2 + 2 Ag$

   $ZnO + C \longrightarrow Zn + CO$

   $HCl + NaOH \longrightarrow NaCl + H_2O$

   5. Why double displacement reactions are not considered as redox reactions? Explain with one example

   6. What is the difference between oxidation half reaction and reduction half reaction?

   7. During electrolysis which type of reaction takes place at cathode and anode respectively?

8. Write the cathode and anode reactions when electrolysis of molten NaCl takes place.

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