SID Study Material



Subject: Science 1 Marks: 25

Chapter: Chemical reactions and equations

DPP-2

I. Answer (5)

1. The conversion of ferrous sulphate to ferric sulphate is...... reaction.

2. Identify from the following reactions the reactants that undergo oxidation and reduction.

$$NiO + H_2 \longrightarrow Ni + H_2O$$

- 3. is used in the voters-ink
- 4. The chemical formula of rust is
- 5. Name the catalyst used to accelerate the rate of decomposition of hydrogen peroxide.

II. Answer any three.

(6)

- Explain the types of reaction with reference to oxygen and hydrogen. Illustrate with examples.
- 2. Give scientific reasons. While preparing dilute sulphuric acid from concentrated sulphuric acid in the laboratory, the concentrated sulphuric acid is added slowly to water with constant stirring.
- 3. Write the reactions
 - a. Calcium oxide is mixed with water.
 - b. Ammonia gas reacts with hydrogen chloride gas.
- 4. Name the various oxidants. How nascent oxygen is liberated from these oxidants.

III. Answer any three

(9)

1. Balance the following equations.

i.
$$SO_2 + H_2S \longrightarrow S + H_2O$$

ii. Ag + HCl
$$\longrightarrow$$
 AgCl + H₂

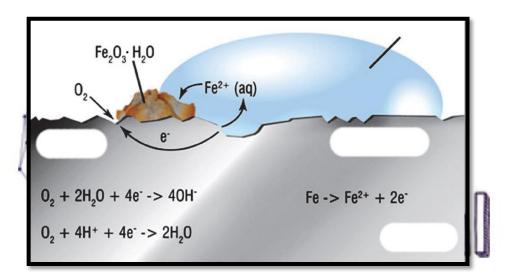
iii. NaOH + $H_2SO_4 \longrightarrow Na_2SO_4 + H_2O$

- 2. Define
 - i. Unbalanced equation.
 - ii. Chemical equation.
 - iii. Double displacement reaction,
- 3. Explain redox reactions with two examples.
- 4. Write five conventions used to write chemical equation.

IV. Answer any one

(5)

- 1. Explain the factors affecting rate of reaction.
- 2. Observe the following picture a write down the chemical reactions with explanation by completing the diagram.





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