- I. Very short questions:
- 1. Balance the following equations

$$Pb(NO_3)_2 \longrightarrow Pbo + NO_2 + O_2$$

- 2. Name the acid present in vinegar.
- 3. Give one example of a reaction which is a double displacement reaction as well as a precipitation reaction.
- 4. Define oxidation and reduction.
- 5. Why does dry HCL gas not change the colour of the dry litmus paper?

## II.Short answer questions.

- 1.In the reaction  $CuO+H_2 \longrightarrow CuO + H_2O$ , name the substance which is oxidised and which is reduced.
- 2. Name the type of chemical reaction represented by the following equation.

i. CaO +H<sub>2</sub>o -
$$\rightarrow$$
 Ca(OH)<sub>2</sub>

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- 3. List two differences between an acid and a base based on their chemical properties.
- 4. While diluting an acid, why it is recommended that acid should be added to water and not water to that?
- 5. Translate the following statements into chemical equations.
  - i. Magnesium burns in the presence of nitrogen to form magnesium nitride.
  - ii. Lead nitrate reacts with sulphuric acid to form a precipitate of lead sulphate and nitric acid.

## III.Long answer question.

- 1.a. Which gas is usually liberated when an acid reacts with a metal? Illustrate with an example. How will you test for the presence of this gas?
  - b. Why do we apply paint on an iron articles?
- 2.a. Why should curd and sour substance not be kept in brass and copper vessels?
  - b. Identify the oxidising agent in the following reaction.

i. 
$$Pb_3O_4 + 8HCl \rightarrow 3PbCl_2 + Cl_2 + 4H_2O$$

ii.2Mg 
$$+O_2 \rightarrow 2MgO$$

iii.CuSO<sub>4</sub> +Zn 
$$\rightarrow$$
 Cu + ZnSO<sub>4</sub>

- 3. Write the balanced chemical equation for the following and identify the type of reaction in each case.
  - 1.Potassium bromide + Barium iodide → Potassium iodide +Barium bromide
  - 2. Magnesium + Hydrochloric acid -→ Magnesium Chloride + Hydrogen
  - 3. Zinc carbonate → zinc oxide + carbon dioxide