CHEMISTRY

QUESTION 1

1.Which property of concentrated sulphuric acid is made use of in each of the

following cases and write its equations;

a).As a source of hydrogen by diluting it and adding a strip of Magnesium.

b) In the preparation of CO gas from formic acid.   (2)

2.What do you observe when dilute sulphuric acid is added to sodium bicarbonate.

Write its equation ?   (2)

QUESTION 2

1.Define the following term   a) Acidity of a base .   (1)

2.Write an equation to get a gelatinous white precipitate as metal hydroxide

   using sodium hydroxide solution.   (1)

3.Write **equation** using the type of compound given in the description;

a) A diacidic base on warming with ammonium salt to give ammonia gas.   (1)

QUESTION 3

1.Write balanced equation

a) Aluminium is warmed with NaOH solution.   (1)

2.Write **observation** and balanced **equation** for the following reaction;

1.Reaction of NH_4OH solution with Iron (III) Chloride solution.

2.NaOH is added dropwise till in excess to a solution of $ZnSO_4$.   (3)

QUESTION 4

1Write **equation** for the decomposition of the following **nitrate** salt on

heating.

a)which produce only one gas and a residue. (1)

2.What do you observe when copper reacts with conc. HNO_3. Write its

equation. (1)

4.Write the equation in the catalytic chamber with condition used in Ostwald

Process. (1)

QUESTION 5

1.Fill in the blanks:

Ammonia acts as a base due to the presence of --------- -- --------- on the

nitrogen atom and it ------------- metallic oxides. (1)

2.Give balanced equation for the following conversions:

a) Ammonia to nitrogen using an acidic gas.

c).Getting lead from lead oxide using Ammonia gas (2)

QUESTION 6

1.What property of HCl is demonstrated when it is collected by downward

delivery? Write equation for the lab.preparation of HCl gas? (2)

3.Write appropriate observation for the following;

a)Dilute HCl is added to lead nitrate solution and the mixture is heated. (1)