CHAPTER-1 HYDROGEN CHLORIDE & HYDROCHLORIC ACID

1. What will you observe when ?
   (a) HCl gas is passed through silver nitrate solution ?
   (b) HCl gas comes in contact with ammonia solution ?
   (c) HCl gas is passed through lead nitrate solution and the product is heated ?
   (d) Platinum is added to Aqua regia ?
   (e) CuO is treated with dil. HCl acid ?
   (f) Manganese dioxide is added to conc. HCl ?
2. What would you see when hydrogen chloride is mixed with ammonia ?
3. What do you observe when concentrated hydrochloric acid is added to lead (IV) oxide with warming ?
4. State the colour of water that has entered the round bottomed flask ?
5. Describe the two colour changes which take place when moist blue litmus is placed ina gas jar of chlorine.
6. What is the colour that takes place when chlorine water is exposed to sunlight ?
7. What would you see when hydrogen chloride mixes with ammonia ?

CHAPTER-2 AMMONIA

1. State the observation for the following:
   (a) Ammonia gas bubbled through red litmus soln.
   (b) Ammonia burns in oxygen.
   (c) Ammonia burns in oxygen in the presence of catalyst Pt.
   (d) Ammonia is passed over heated copper oxide.

(e) Ammonia is passed over heated Lead (II) oxide.

(f) When NH_3 gas in excess is mixed with chlorine.

(g) When NH_3 gas is passed through neutral litmus solution

2. State what is observed when excess of ammonia is passed through an aqueous soloution of lead nitrate.
3. In laboratory preparation of a pungent smelling gas which is alkaline in nature. Name the gas collected in the jar.

CHAPTER-3 NITRIC ACID

1. State what is observed when nitric acid is kept in a reagent bottle for a long time.
2. What do you see when concentrated nitric acid is added to copper ?
3. Account for the yellow colour that appears in in concentrated nitric acid when it is left standing in an ordinary glass bottle.

CHAPTER-4 SULPHURIC ACID

1. State your observations when:

   (a) Iron (II) sulphide reacts with (dil.) H_2SO_4

   (b) Mg is reacted with H_2SO_4

   (c) SO_2 is passed through H_2S water

   (d) SO_2 is passed through acidified $KMnO_4$

   (e) H_2S is passed through acidified $KMnO_4$

   (f) Lead nitrate is added ti dil. H_2SO_4

(g) A beaker of conc. H_2SO_4 is left open to the atmosphere.

(h) Water is added to conc. H_2SO_4

(i) $FeSO_4$ crystals come in contact with conc H_2SO_4

(j) Burning Mg ribbon is introduced in a jar of SO_2

2. A black colour solid which on rection with dilute sulphuric acid forms a blue coloured solution is ?

CHAPTER-5 ORGANIC CHEMISTRY

1. What will you observe when:

(a) Ethene is passed through Bromine solution in Carbon tetrachloride.

(b) Ethyne is passed through ammonical cuprous chloride solution (Fehling's sol^n).

(c) Ethyne is passed through ammonical silver nitrate soloution (Tollen's reagent).

(d) Sodium is dropped in methanol.

(e) Ethene is passed through potassium permanganate solution (Baeyer's reagent).

2. What would you see when ethylene is bubbled through asolution of bromine in carbon tetrachloride ?