



CLASS: X

Subject: CHEMISTRY

Date: 12/05/2020

Topic: ACIDS, BASES AND SALTS

Time Limit: 40 MNTS

Worksheet No. :5

[Copy the questions and solve them on a sheet of paper date wise. Keep the worksheets ready in a file to be submitted on the opening day.]

1) Write balanced equations for the following reactions:

- a) Lead sulphate from lead nitrate solution and dilute sulphuric acid.
- b) Copper sulphate from copper and concentrated sulphuric acid.
- c) Lead chloride from lead nitrate solution and sodium chloride solution.
- d) Ammonium sulphate from ammonia and dilute sulphuric acid.
- e) Sodium chloride from sodium carbonate solution and dilute hydrochloric acid.

2) Mention the colour changes observed when they are added to acids:

- a) Alkaline phenolphthalein solution
- b) Methyl orange solution
- c) Neutral litmus solution

3) Mention the terms defined by the following sentences:

- a) A soluble base-
- b) The insoluble solid formed when two solutions are mixed together-
- c) An acidic solution in which there is only partial ionization of the solute molecules-

4) What is the difference between the chemical nature of an aqueous solution of Hydrogen chloride and an aqueous solution of ammonia?

5) From the following list of substances, choose the one substance in each case which matches the description (a) to (f) given below : (write down the names exactly as they are given in the list. Do not write formulae)

(Ammonium nitrate, Calcium hydrogen carbonate, Copper carbonate, Lead carbonate, Lead nitrate, Potassium nitrate, Sodium carbonate, Sodium hydrogen carbonate, Zinc carbonate)

- a) A hydrogen carbonate which exists in solid state-
- b) A carbonate not decomposed by heat-
- c) A green coloured carbonate which turns black on heating-
- d) A nitrate which gives off only oxygen when heated-
- e) A nitrate which on heating decomposes into nitrous oxide and steam-
- f) A nitrate which gives off oxygen and nitrogen dioxide when heated-

6) Define: Efflorescence, Deliquescence.

7) Solution "P" has pH of 13, solution Q has a pH of 6 and solution "R" has a pH of 2.

- a) Which solution will liberate Ammonia from Ammonium sulphate?
- b) Which solution is a strong acid? Which solution contains solute molecules as well as ions?

8) For each of the salts A, B, C and D, suggest a suitable method of preparation which relates to its description given below:

- a) `A` is Sodium salt.
- b) `B` is an insoluble salt.
- c) `C` is a soluble salt of copper.
- d) `D` is a soluble salt of zinc.

(Do not describe the procedure for the preparation .Refer only to the appropriate method)

9) What do you observe when?

- a) Hydrated Copper sulphate is heated.
- b) Lead nitrate is heated.
- c) Ferric chloride is exposed to atmosphere.
- d) Copper carbonate is heated.
- e) Copper hydroxide is heated.

10) How are the following conversions carried out? (Give balanced chemical equations only)


