

I. 1. Gravimetric Analysis :-

Gravimetric analysis is a method in analytical chemistry to determine the quantity of analyte based on the mass of solid. Example: Measuring the solids suspended in the water supply sample. Once a known volume of water is filtered, the collected solids are weighed.

The principal behind the gravimetric analysis is that the mass of an ion in a pure compound can be determined. Later, used to find the mass percent of the same ion in a known quantity of an impure compound.

Step followed in the Gravimetric Analysis.

- i) Preparation of solution containing a known weight of the sample.
- ii) Separation of the desired constituent.
- iii) Weighing the isolated constituent.
- iv) Computation of the amount of the particular constituent in the sample from the observed weight of the isolated substance.

2. Complexometric titration \Rightarrow

Complexometric is a form of volumetric analysis in which the formation of a colored complex is used to indicate the end point of the titration.

Complexometric titration one of the following four types.

- i) Direct titration
- ii) Back "
- iii) Replacement "
- iv) Indirect "

4. Antacid :-

Antacid are a combination of various compound with various salt and calcium, magnesium and aluminium as active ingredient.

- The substance which is used to relieve indigestion, caused by too much of HCl secretion in the stomach, it is called as Antacid. The chemical formula of the substance which are used as antacid ~~are~~ Calcium hydroxide Ca(OH)_2 is an example of antacid. The other example of sodium bicarbonate (NaHCO_3), magnesium hydroxide (Mg(OH)_2) and aluminium hydroxide (Al(OH)_3) which are basic in nature because it neutralize the excess acid in the stomach which cause acidity.



II. 1. Mohr's Method \Rightarrow

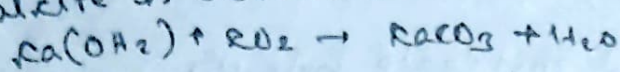
- Mohr's titration is defined as the type of titration in which the chloride ion concentration of the given solution is determined by titrating it with silver nitrate. When silver nitrate solution is added to the given solution slowly, the silver chloride precipitates are formed.

Fajan's Method \Rightarrow

The precipitation titration method of Fajan's method was given by American chemist Kazimierz Fajan. That's why it is known as Fajan's method. This method also known as the indicator adsorption method because in this method chloride ions present in excess are adsorbed on silver chloride surface in this method dichloro fluorescein is used as an indicator.

4. Calcium Carbonate -

Preparation \Rightarrow CaCO_3 is obtained by using carbon dioxide and slaked lime as raw materials. When carbon dioxide is passed through slaked lime, calcite is obtained.



Storage \Rightarrow It should be stored in a cool and dry place.

Uses \Rightarrow Calcium carbonate is one of the most popular chemicals which is first encountered in school chemistry, where the use of chalk (a form of CaCO_3) is found. It is also used in many forms such as marble, limestone etc.

5. Potassium Permanganate \Rightarrow

KMnO_4 is also used as a regeneration chemical in well water treatment for the removal of hydrogen sulphide and iron. This compound is also used as disinfectant to cure certain skin conditions like foot fungal infection, dermatitis.

Preparation of potassium permanganate is prepared by the fusion of MnO_2 (pyrolusite) with potassium hydroxide and oxidizing agent like KNO_3 to KMnO_4 .

2111. 1. Masking Agent include manganese, alkaline earth and lead ions and demasking agents are chemical reagents that are useful to introducing the impurities which were masked before the reaction mixture.

2. A best example of self ~~indic~~ indicator is potassium permanganate which play as self-indicator in oxidation reduction titration.

4. Brand name of Silver Nitrate that Silverbhe.
3. Boric Acid also called hydrogen borate on orthoboric acid (H_3BO_3).
Brand name of Boric Acid Powder.
5. First Aid steps:-
 - i) Identify and mitigate potential danger.
 - ii) Call for help.
 - iii) Check for response.
6. Composition of Magaldate is water, magnesium and aluminium.
8. Rantac Syrup. Brand name Rantac.
Alesul Mps. " Gelusil.
9. Iron formulation anemia and prophylaxis.
10. Hydrogen Peroxide molecules weight 34.0147g/m.

