**Chemistry Lab**

Q-1 What is qualitative analysis?

Ans- Qualitative analysis are the methods which are used to determine the constituents of a compound.

Q-2 What is quantitative analysis?

Ans- Quantitative analysis is a technique that is used to determine the absolute or relative abundance of one or more substances present in a sample.

Q-3 Define viscosity of a liquid.

Ans- The property of a liquid that determines its resistance its resistance to flow is known as viscosity.

Q-4 What are the types of viscometer which are used for calculation of viscosity of a liquid?

Ans-Viscosity can be measured by three types of standard viscometer namely Redwood viscometer, Engler viscometer, Saybolt viscometer.

Q-5 What is the formula of viscosity of a liquid?

Ans- ɳ2/ɳ1 = (ρ2)(t2)/(ρ1)(t1)

Where ɳ2= viscosity of test liquid sample , ɳ1= viscosity of water

ρ2=density of test liquid sample , ρ1= density of water

t2= time of flow of test liquid sample , t1= time of flow of water.

Q6- Define surface tension.

Ans- Surface tension is defined as the tension of the surface film of a liquid caused by the attraction of the particles in the surface layer by the bulk of the liquid, which tends to minimize the surface area.

Q-7 What is the principle of Conductometric titration ?

Ans- The principle of conductometrictitration is based on the fact that during the titration one of the ions is replaced by the other and invariably these two ions differ in the ionic conductivity with the result that conductivity of the solution varies during the course of titration.

Q8- Define Molarity and Normality.

Ans – Molarity is defined as the number of moles of solute that are present per liter of the solution.

Normality is defined as the gram equivalent of the solute per unit volume of the solution in liters.

Q9- What is the relation between molarity and normality?

Ans- Normality = Molarity \* (Acidity or Basicity)

Q10- Name any three strong acids?

Ans- Hydrochloricacid , Nitric acid and Sulfuric acid.

Q11- What is the chemical formula of iodoform?

Ans- CHI₃

Q12- What are the reactants used for synthesis of iodoform?

Ans- Iodine , Acetone and Sodium Hydroxide (base).

Q13- What do you understand by Hardness of water?

Ans- Water that contains salts of magnesium and calcium principally as bicarbonates , chlorides and sulfates is known as hard water.

Q14- Suggest a method for the determination of hardness of water?

Ans- EDTA method (Ethylenediaminetetraacetate method).

Q15- What is the principle of paper chromatography?

Ans- Chromatography method of separation is based on the fact that though two substances are dissolved in the same solvent but their solubilities can be different .The component which is more soluble , rises faster and gets separated from the mixture.