CHEMISTRY IX-X GRADES

LIST OF PRACTICAL

STANDARD EXPERIMENTS

Learning Outcomes of Practical Works

Chapter 1		
	Experiment 1.1	Separate the given mixture of iron filings and sand by Physical method.
Chapter 5		
	Experiment 5.1	Determine the melting point of the given compound (Napthalene).
	Experiment 5.2	
		Determine the melting point of the given compound (Biphenyl).
	Experiment 5.3	Determine the boiling point of the given liquid (Acetone)
	Experiment 5.4	Determine the boiling point of the given liquid (Toluene)
	Experiment 5.5	Determine the boiling point of the given liquid (Ethyl Alcohol).
	Experiment 5.6	Demonstrate sublimation using ammonium chloride.
	Experiment 5.7	Separate naphthalene from the given mixture of sand and naphthalene by sublimation.
	Experiment 5.8	Separate the given mixture of alcohol and water by Distillation.
	Experiment 5.9	Demonstrate that a chemical reaction releases energy in the form of heat.
Chapter 6		
	Experiment 6.1	Prepare 100cm^3 of 0.1M sodium hydroxide (NaOH) Solution.
	Experiment 6.2	Prepare 100cm^3 of 0.1M sodium carbonate (Na_2CO_3) Solution.
	Experiment 6.3	Prepare 250cm^3 of 0.1M HCl solution
	Experiment 6.4	Prepare 250cm^3 of 0.1M oxalic acid ($H_2C_2O_4$ $2H_2O$) Solution.
	Experiment 6.5	Prepare 100 cm^3 of 0.1 M sodium hydroxide (NaOH) Solution from the given 1M solution.
	Experiment 6.6	Prepare 100 cm^3 of 0.01M Na_2 CO_3 solution from the given 0.1 M solution.
	Experiment 6.7	Prepare 100 cm^3 of 0.01M hydrochloric acid (HCl) solution from the given 0.1 M solution.
	Experiment 6.8	Prepare 100cm^3 of 0.01M oxalic acid solution from the given 0.1M solution.
	Experiment 6.9	Prepare pure copper sulphate crystals from the given Impure sample
	Experiment 6.10	Demonstrate that miscible liquids dissolve in each other and immiscible liquids do not.
	Experiment 6.11	Demonstrate that temperature effects the solubility
Chapter 7		
	Experiment 7.1	Demonstrate the conductivity of different given solutions

	Experiment 7.2	Demonstrate a metal displacement reaction in aqueous medium
	Experiment 7.3	Demonstrate that an element and a compound can react to perform a different element and a different compound
Chapter 8		
	Experiment 8.1	Demonstrate that two elements combine to form a binary compound
	Experiment 8.2	Demonstrate that compounds can be products of a decomposition reaction.
	Experiment 8.3	Demonstrates that some processes absorb energy.
Part - II		
Chapter 10 **Acids, Base and Salts**		
	Experiment 10.1	Identify sodium, calcium, strontium, barium, copper and potassium ions by flame test.
	Experiment 10.2	Standardize the given NaOH solution volumetrically
	Experiment 10.3	Standardize the given HCl solution volumetrically.
	Experiment 10.4	Determine the exact molarity of the $Na_2\ Co_3$ solution volumetrically.
	Experiment 10.5	Determine the exact molarity of a solution of oxalic acid volumetrically.
	Experiment 10.6	Demonstrate that some natural substances are weak acids.
	Experiment 10.7	Classify substances as acidic, basic or neutral
Chapter 11 **Organic Chemistry**		
	Experiment 11.1	Identify aldehydes using Fehling's Test and Tollen's Test.
	Experiment 11.2	Identify ketenes using 2,4 –dinitrophenyl hydrazine test
	Experiment 11.3	Identify carboxylic acids using sodium carbonate test.
	Experiment 11.4	Identify phenol using Ferric Chloride test.
Chapter 12 **Hydrocarbons**		
	Experiment 12.1	Identify saturated and unsaturated organic compounds by KMnO_4 test.
Chapter 13 **Biochemistry**		
	Experiment 13.1	Demonstrate that sugar decomposes into elements and other compounds.
Chapter 15 **Environmental Chemistry (Water)**		
	Experiment 15.1	Demonstrate the softening of water by removal of calcium and magnesium ions from hard water.