

SS1 FIRST TERM SCHEME OF WORK FOR 2024 ACADEMIC SESSION

WEEKS	TOPICS/ CONTENTS
1.	INTRODUCTION TO CHEMISTRY: Meaning of chemistry, career prospects tied to Chemistry, applications {Hospital, Military, Teaching, Chemical and petrochemical Industries, space science and Agriculture etc}, Adverse effect of chemicals, Drug Abuse, poisoning, corrosion, pollution Scientific method.
2.	CHEMICAL INDUSTRY: Raw materials for chemical industry, sources of raw materials and locations, Definition of terms {Raw materials, finished products, Bye products etc} Factors to consider or siting industries, Biotechnology and Biogas.
3.	CHEMICAL INDUSTRIES: Types of chemical industries, {i} Heavy {ii} Fine chemicals, Classifications of chemical industries, Importance to {i} the individual , {ii} the nation CHEMICAL INDUSTRIES : Excursion to chemical industries
4.	STANDARD SEPARATION TECHNIQUES : Classification of substances, Filtration, Evaporation, Decantation, Floatation, Frostation, Magnetization, {magnetism}, Crystallization and fractional crystallization.
5.	STANDARD SEPARATION TECHNIQUES FOR MIXTURES: Distillation and fractional Distillation, , Precipitation, Chromatography, Sublimation, Pure and impure substances,
6.	PARTICULATE NATURE OF MATTER: Physical and chemical changes, Atoms molecules And ions, Dalton's atomic theory and its modifications.
7.	PARTICULATE NATURE OF MATTER: Discovery of atoms { John Dalton, J.J Thompson, Earnest Rutherford, Niel Bohr etc}, Constituents of atom{ Protons, Neutrons and Electrons, Arrangements of electrons around the nucleus, {shell Notation KLMN}
8.	PARTICULATE NATURE OF MATTER: Structure of Atom {introduction}, Quantum Mechanics,{the four quantum numbers} Principles that govern the arrangement of Electrons in the atomic orbitals: Pauli Exclusive principles, Hund's Rule, and Aufbau's Principles.
9.	PARTICULATE NAMTURE OF MATTER: Principles that govern the arrangement of Electrons in the atomic orbitals {continued}, Atomic orbitals, s,p,d,f electronic Configurations
10.	PARTICULATE NATURE OF MATTER: Atomic number, mass number, and isotopy., Relative atomic masses based on 12C ISOTOPE
11.	Revision
12.	Examinations
13.	Examinations