

Govt college, Safidon (JIND)
Lesson plan Session 2025-26 [odd Sem]

Teacher's Name :- Seema Rani

Class - B.Sc - IIIrd Sem
Subject - Chemistry

August	s and p-block elements:- Salient features of hydrides, oxides, halides, hydrides of s-block elements. Structure of Disobane and Borazire Catenation, carbides, fluorocarbons, silicates, Comparison of acidic strength of oxyacids. Test-I
September	Electrochemistry I :- Electrolytic conduction, factors affecting electrolytic conduction Electrochemistry-II Calculations of thermodynamic quantities of cell reaction (ΔG, ΔH & K) Hydrogen electrode Test-II, Assignment-I
October	Alkynes :- Nomenclature and its structure, methods of formation, Mechanism of electrophilic and nucleophilic addition reaction. Assignment-II Stereochemistry of organic compound, R & S Configuration, conformation of cyclobutane, cyclohexane.
November	Benzene and its derivatives:- Nomenclature of aromatic nucleus & side chain, Alkyl halides :- Nomenclature, methods of formation, SN^1 & SN^2 Aryl halides, Relative reactivities of alkyl halides alkyl, vinyl and aryl halides. Revision

Seema Rani

Govt college, Safidon (JIND)

Lesson plan Session 2025-26 [Odd Sem]

Class :- B.Sc-I sem (minor)

Name of Teacher :- Seema Rani

Subject Chemistry

August	Covalent Bond, Valence bond theory approach, Valence shell electron pair repulsion (VSEPR) theory, hybridization linear, trigonal planar, square planar, tetrahedral, octahedral, molecular orbital theory of (N_2 , O_2) and (CO , NO), Assignment-1
September	Chemical kinetics, rate of reaction, rate equation, factor affecting of rate of reaction, Order and molecularity of a reaction, Integration rate expression of zero, first, second order reaction, Half-life period of a reaction. Test-1, Assignment-II
October	Alkane, Nomenclature, classification, isomerism in alkanes, methods of formation Wurtz reaction, Kolbe reaction, Corey-House reaction and decarboxylation of carboxylic acids, reactivity and selectivity Test-II
November	Metallic Bond and Semiconductor Metal Band - Qualitative idea of valence band and Band theories of metallic bond (Conductor, semiconductor, insulator) Semiconductor - Introduction, types and applications Revision.

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Govt college, Safidon (JIND)

Lesson plan Session 2025-26 [Odd Semester]

Name of the Teacher :- Seema Rani

Class :- B.Sc-1 sem
Subject :- Chemistry

August	Atomic structure, Dual behaviour of matter, de Broglie's relation, Heisenberg's uncertainty principle, atomic orbital, significance of quantum number, periodic table and atomic properties, atomic & ionic radii, ionisation energy, Test I and Assignment-1
September	Gaseous state, Kinetic theory of gases, Maxwell's distribution of velocities and energies, calculation of root mean square velocity, average velocity, and most probable velocity. Critical phenomenon, critical pressure, critical volume, van der Waal's constants, Test-II
October	Structure and bonding, Van der Waal's interaction, Concept of resonance and its application, hyperconjugation, inductive effect. Mechanism of organic reaction, Types of organic reaction, Substitution, Addition, Condensation, Elimination, Pericyclic reaction, Assignment-II
November	Liquid state, Surface tension, refractive index, viscosity, vapour pressure, Solid state :- classification of solids, Law of constancy of interfacial angles, Law of rational indices, seven crystal systems, Bragg's law. Revision

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