

Lesson Plan (2022-23) Odd Semester

Class		Name of Teacher
Aug.	B.Sc. 5 th Sem	AKSHI GOYAL, Asst. Prof. in Chemistry
		Introduction to NMR spectroscopy.
Sept.	1 st week (1-3)	NMR spectroscopy - I
	2 nd week (5-10)	NMR spectroscopy - II
	3 rd week (12-17)	Carbohydrates - I
	4 th week (19-24)	Carbohydrates - I + Carbohydrates II
	5 th week (26-30)	Organometallic Compounds
Oct.	1 st week (3-8)	Metal-ligand Bonding in Transition Metal Complexes
	2 nd week (10-15)	Metal-ligand Bonding in Transition Metal Complexes
	3 rd week (17-22)	Thermodynamic and Kinetic Aspects of Metal Complexes
	4 th week	Diwali Holidays
	5 th week	-
Nov.	1 st week (1-5)	Magnetic Properties of Transition Metal Complexes
	2 nd week (7-12)	Electronic spectra of Transition Metal Complexes
	3 rd week (14-19)	Electronic spectra of Transition Metal Complexes
	4 th week (21-26)	Quantum Mechanics - I
	5 th week (28-30)	Quantum Mechanics - I
Dec.	1 st week (1-3)	Physical Properties and Molecular structure
	2 nd week (5-10)	Rotational spectra & Introduction to spectroscopy
	3 rd week (12-17)	Vibrational spectra
	4 th week (19-24)	Raman spectra
	5 th week (26-30)	Revision & Tests.



(AKSHI GOYAL)
 (ASST. PROF. IN CHEM.)
 GCG MANESAR, GGM

Lesson Plan (2022-23) Odd Semester


Class		Name of Teacher
B.Sc. 3 rd Sem		AKSHI GOYAL, Asst. Prof. in Chemistry
Aug.		Introduction to Alcohols & Epoxides - str. and Bonding
Sept	1 st week (1 st -3 rd)	Alcohols + Epoxides
	2 nd week 5 th -6	Phenols with mechanisms of all named reactions
	3 rd week 12-17	UV spectroscopy
	4 th week 19-24	Carboxylic Acids & Acid Derivatives
	5 th week 26-30	Carboxylic Acids & Acid Derivatives + Thermodynamics Introduction
Oct.	1 st week 3-8	Thermodynamics - I
	2 nd week 10-15	Thermodynamics - II
	3 rd week 17-22	Chemical Equilibrium
	4 th week	Diwali Holidays
	5 th week	
Nov.	1 st week 1-5	Distribution law
	2 nd week 7-12	Co-ordination Compounds
	3 rd week 14-19	Chemistry of elements of first Transition series - Catal. Part + Co-ordination Compounds
	4 th week 21-26	Chemistry of elements of II nd & III rd Transition series
	5 th week 28-30	Non-aqueous solvents.
Dec.	1 st week 1-3	Revision of UV-spectroscopy.
	2 nd week 5-10	Named Reactions of Organic Chemistry
	3 rd week 12-17	Le-chatelier's principle, laws of Thermodynamics
	4 th week 19-24	Numericals of Thermodynamics & Chemical Equil. & Distrib. Law
	5 th week 26-30	Revision & Tests

Akshi

(Asst. Prof. in Chem.)
(GCA Manesar, GGM)

Lesson Plan (2022-23) Odd Semester

Class B.Sc. 1 st Sem		Name of Teacher
Aug.		AKSHI GOYAL, Asst. Prof. in Chemistry
		Introduction to structure + Bonding
	1 st week (1 st -5 th)	Vander waal interactions, Inductive effect, Hyperconjugation, Resonance + Electromeric effect.
	2 nd week (6 th -10 th)	Stereochemistry of Organic Compounds - I
Sept	3 rd week (11 th -15 th)	Stereochemistry of Organic Compounds - II
	4 th week (16 th -20 th)	Mechanism of Organic Reactions + Introduction to alkanes & cycloalkanes
	5 th week (21 st -25 th)	Alkanes and Cycloalkanes.
	1 st week (26 th -30 th)	Atomic structure + Introduction to Periodic Properties
Oct.	2 nd week (31 st -5 th)	Periodic Properties + Covalent Bond Introduction
	3 rd week (6 th -10 th)	Covalent Bond + Ionic Solids (Introduction)
	4 th week (11 th -15 th)	Diwali Holidays
	5 th week	-
	1 st week (16 th -20 th)	Gaseous state upto Mean free path.
Nov.	2 nd week (21 st -25 th)	Deviation of Real gas from ideal behaviour to Vander waal eq ⁿ , Critical phenomenon upto Vander waal constants
	3 rd week (26 th -30 th)	Compressibility factor to liquefaction of Gases.
	4 th week (31 st -5 th)	liquid states - Properties of liquids, surface tension, viscosity, vapour pressure
	5 th week (6 th -10 th)	optical rotation and their determination.
	1 st week (11 th -15 th)	Solid state - Introduction
Dec.	2 nd week (16 th -20 th)	Laws of crystallography, symmetry elements
	3 rd week (21 st -25 th)	Bragg's eq ⁿ , Bravais lattices, Crystal str. of NaCl, KCl, liquid crystals.
	4 th week (26 th -30 th)	Stereochemistry I & II - Thorough revision
	5 th week	Tests and Revision of Important Topics


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