

Lesson Plan for the Month April 2022 to July 2022		Subject: CHEMISTRY	
Name of the Teacher	Ms. SARITA	Class	B.Sc. I Sem - 2nd
09-04-2022 To 16-04-2022	← EXAMINATION →		
18-04-2022 To 23-04-2022	Aromatic Hydrocarbons: Introduction (case Benzene), preparation of Benzene.		
25-04-2022 To 30-04-2022	Chemical Reactions of Aromatic Hydrocarbons: Nitration, Sulphonation, Halogenation.		
02-05-2022 To 07-05-2022	Friedel - Craft reactions, side chain oxidation of alkyl benzene.		
09-05-2022 To 14-05-2022	Alkyl Halides:- Introduction, Nomenclature Preparation of Alkyl Halides. Types of Nucleophilic substitution S_N1 , S_N2 and S_Ni reactions.		
16-05-2022 To 21-05-2022	Chemical Reactions of alkyl halides.		
23-05-2022 To 28-05-2022	Elimination v/s Substitution. Aryl Halides: Introduction, Preparation of Aryl halides		
30-05-2022 To 04-06-2022	Chemical properties of Aryl halides.		
05-06-2022 To 12-06-2022	Break		

13-06-2022 To 18-06-2022	Alcohols : Preparation of Alcohols, Physical and Chemical properties of Alcohols.
20-06-2022 To 25-06-2022	Phenols :- Preparation of Phenols, Physical and Chemical properties of Phenols
27-06-2022 To 02-07-2022	Chemical Reaction of Phenols (remaining). Aldehyde and Ketone : Introduction, Preparation of Aldehyde, Chemical reaction of Aldehyde
04-07-2022 To 09-07-2022	Ketone : Introduction and preparation of ketone, Chemical properties of ketone

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Name of the Teacher	MS. SARITA	Class	B.Sc. II Sem-04
09-04-2022 To 16-04-2022	<u>Thermodynamics-III</u> : - second law of thermodynamic, need for the law, different statement of the law, carnot cycles and its efficiency.		
18-04-2022 To 23-04-2022	Thermodynamics scale of temperature, concept of entropy, entropy variation with P and T, criteria of spontaneity & equilibrium.		
25-04-2022 To 30-04-2022	entropy change in ideal gases and mixing of gases.		
02-05-2022 To 07-05-2022	Gibbs function (G) and Helmholtz function (A), variation of G & A with P, V & T		
09-05-2022 To 14-05-2022	A and G as criteria for spontaneity, their advantage over entropy change.		
16-05-2022 To 21-05-2022	3rd law of thermodynamics, Nernst heat theorem, residual entropy, evaluation of heat absolute entropy from heat capacity data.		
23-05-2022 To 28-05-2022	<u>Electrochemistry-III</u> : Electrolytic cell galvanic cell, EMF of cell & its measurement.		
30-05-2022 To 04-06-2022	Weston standard cell, activity and activity coefficients. calculation of ΔG , ΔH and K		
05-06-2022 To 12-06-2022	Break		

13-06-2022 To 18-06-2022	Types of reversible electrodes.
20-06-2022 To 25-06-2022	Electrode reactions, Nernst Equation, derivation of cell EMF and single electrode potential, standard hydrogen electrode, electrochemical series.
27-06-2022 To 02-07-2022	<u>Electrochemistry - IV</u> : Concentration cells with or without transference, liquid junction potential, application of EMF measurement.
04-07-2022 To 09-07-2022	Determination of pH using Hydrogen electrode, quinhydrone electrode & glass electrode by potentiometric methods.

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Name of the Teacher	Ms. SARITA	Class	B. Sc. III sem-06
09-04-2022 To 16-04-2022	<u>Electronic spectroscopy</u> :- Concept of potential energy curve for bonding and antibonding Mo, selection rules, Franck-Condon principle.		
18-04-2022 To 23-04-2022	<u>Jablonski diagram</u> , determination of term symbol of Mo. and transitions.		
25-04-2022 To 30-04-2022	<u>Photochemistry</u> : interaction of radiation with matter, thermal + photochemical process, laws of photochemistry, Jablonski diagram.		
02-05-2022 To 07-05-2022	Qualitative description of Fluorescence, phosphorescence, non radiative process, quantum yield, photosensitized reactions.		
09-05-2022 To 14-05-2022	Phase Equilibrium :- Statement and Meaning of the terms - phase component, Degree of Freedom, thermodynamic derivation of phase rule.		
16-05-2022 To 21-05-2022	Phase equilibria of Water and Sulphur system. Phase equilibria of two component system e.g Pb-Ag system.		
23-05-2022 To 28-05-2022	<u>Solutions</u> : ideal + Non ideal solution, Methods of expressing concentration of solutions, colligative properties, Raoult's law, molecular wt. determination.		
30-05-2022 To 04-06-2022	Elevation in boiling point depression in freezing point, osmosis, degree of dissociation and association of solutes.		
05-06-2022 To 12-06-2022	Break		

13-06-2022 To 18-06-2022	<u>Heterocyclic compounds</u> : structure, Methods of preparation & chemical properties of pyrrole, Furan, thiophene, pyridine, indole, quinoline & isoquinoline
20-06-2022 To 25-06-2022	<u>Organo sulphur Compounds</u> : - Nomenclature, structure Method of formation and chemical reactions of organosulphur compounds, synthetic detergents.
27-06-2022 To 02-07-2022	organic synthesis via enolates, <u>synthetic polymers</u> : chain growth, free radical, condensative ionic, ZN polymerisation, polyester, polyamide, phenol formaldehyde, polyurethanes, rubbers.
04-07-2022 To 09-07-2022	<u>Amino acids, peptides & proteins</u> : Classification, Acid base behavior, isoelectric point & electrophoresis, preparation of amino acid, structure and nomenclature of peptide and proteins, synthesis of peptides.

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