Sample Format (Lesson Plan)

MCM DAV College for Women, Sector – 36A, Chandigarh
Monthly Teaching Plans (Even Semester)
Session – (2021-22)

Name of the Teacher/s Dr. Nisha Dawra

Department: Chemistry

Class: M.Sc (Ist semester) Subject: Inorganic Chemistry

S.No.	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
1	23.09. 21	5.10.21	VSEPR, Walsh diagrams (tri and tetra-molecules), d π-p π bonds, Bent rule and energetics of hybridization, some simple reactions of covalently bonded molecules..	Lecture
2	6.10.21	23.10.21	Limitations of crystal field theory, molecular orbital theory, octahedral, tetrahedral and square planar complexes, π bonding and molecular orbital theory.	Lecture
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
3	25.10.21	13.11.21	Stepwise and overall formation constant and their interaction, trends in stepwise constants, factors affecting the stability of metal complexes with reference to the nature of metal ion and ligand, chelate effect and its thermodynamic origin,	Lecture
4	15.11.21	30.11.21	Determination of binary formation constants by pH spectrophotometry. Energy profile of a reaction, reactivity of metal complexes,	Lecture and group discussion
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
5	1.12.21	18.01.21	Inert and labile complexes, kinetic application of valance bond and crystal field theories, kinetics of octahedral substitution. Acid hydrolysis, factors affecting acid hydrolysis, Base hydrolysis, conjugate base mechanism, direct and indirect evidences in favour of	Lecture

			conjugate mechanism, reactions without metal-ligand bond cleavage	
6	20.12.21	27.12.21	. Substitution reactions in square planar complexes, the trans effect, mechanism of substitution reaction, Redox reactions, electron transfer reactions, mechanism of one electron transfer reactions, outer sphere type reactions, Cross reactions and Marcus Hush Theory, inner sphere type reactions	Lecture and Group discussion
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
7th November, 2021	The teachers have completed the scheduled chapters and topics as shown in the lesson plan			
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
1th December, 2021	The teachers have completed the scheduled chapters and topics as shown in the lesson plan			
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
18st December, 2021	The teachers have completed the scheduled chapters and topics as shown in the lesson plan			

***Any of these** – (i) Lecture Method; (ii) PPT; (iii) Online Sources; (iv) Group Discussion; (v) Case Studies etc.

Other Methods adopted by the teacher – Please write the specific teaching method

Lesson Plan

MCM DAV College for Women, Sector – 36A, Chandigarh
Monthly Teaching Plans (Odd Semester)
Session – (2021-22)

Name of the Teacher: Dr. Qudrat Hundal

Department: P.G. Department of Chemistry

Class: M.Sc I **Subject: Organic Chemistry CH-412**

S.No.	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
1	23.09.21	8.10.21	**Unit I Nature of Bonding in Organic molecules:** Fundamental concepts, Delocalized chemical bonding, conjugation, Cross conjugation, resonance, hyper- conjugation.	Lecture method
2	09.10.21	25.10.21	**Unit I Nature of Bonding in Organic molecules:** Bonding in fullerenes, Tautomerism, Aromaticity in benzenoid and non-benzenoid compd. Alternant and non alternant hydrocarbons, Huckel's rule. Energy level of π M.O., Annulenes, anti aromaticity, aromaticity, Homo aromaticity, PMO approach. Bonds weaker than covalent, addition compound, crown ether complexes and cryptands, Inclusion compound, cyclo dextrins, Catenanes & rotaxanes. Effect of structure on reactivity-resonance and field effects, steric effect, quantitative treatment. The Hammett equation and linear free energy relationship, substituent and reaction constants. Taft equation.	Lecture method PPT
3	26.10.21	12.11.21	**Unit III Aliphatic Nucleophilic substitution:** S_N1 and S_N2, Neighbouring group participation. Phase transfer catalysis, ambident nucleophiles, regioselectivity, esterification and ester hydrolysis. S_Ni mechanism, SET mechanism, Factors affecting reactivity in SN reactions. Nucleophilic	Lecture method

			substitution at an allylic carbon, aliphatic trigonal carbon and at a vinylic carbon. Phase transfer catalysis, ambident nucleophiles, regioselectivity, esterification and ester hydrolysis. **Aliphatic Electrophilic substitution:** SE1, SE2 and SEi. Electrophilic substitution accompanied by double bond shifts, Factors affecting electrophilic substitution reactions.	
4	13.11.21	30.11.21	**Unit IV Aromatic Electrophilic substitution:** Arenium ion mechanism, orientation and reactivity, energy profile diagrams, Nitration, sulphonation, halogenations, Friedel-Crafts reaction and Friedel-Crafts acylation. o/p- ratio. Ipso attack, orientation in other ring systems. Vilsmeier-Haack Reaction, Gatterman-Koch Reaction, Diazonium coupling. **Aromatic Nucleophilic substitution:** Unimolecular and Bimolecular mechanism. Aromatic Nucleophilic Substitution Reaction via Benzynes. Factors affecting reactivity. Von Richter Rearrangement, Smiles Rearrangement and Sommelet-Hauser Rearrangement.	Lecture method
5	1.12.21	18.12.21	**Unit II Stereochemistry:** Geometrical Isomerism, Conformational Analysis, Conformation of Acyclic systems, cycloalkanes, sugars and decalins. Effect of conformation on reactivity. Steric strain due to undesirable crowding of resolution. Stereospecific and stereoselective synthesis, chirality due to helical shape. Stereochemistry of compounds containing N,S,P	Lecture method
6	20.12.21	27.12.21	Revision and Solution of previous years' question papers	
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
7th November, 2021	The teachers have completed the scheduled chapters and topics as shown in the lesson plan			
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
1st December, 2021	The teachers have completed the scheduled chapters and topics as shown in the lesson plan			
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				

18th December, 2021	The teachers have completed the scheduled chapters and topics as shown in the lesson plan

***Any of these** – (i) Lecture Method; (ii) PPT; (iii) Online Sources; (iv) Group Discussion; (v) Case Studies etc.
Other Methods adopted by the teacher – Please write the specific teaching method

Sample Format (Lesson Plan)

MCM DAV College for Women, Sector – 36A, Chandigarh
Monthly Teaching Plans (Odd Semester)
Session – (2021-22)

Name of the Teacher/s_____Dr. Sagarika Dev_____

Department _____Chemistry_____

Class ____M.Sc. I_____ Subject _Physical Chemistry Section (s)_____

S.No.	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
1	23.09. 21	1.10.21	**Schrodinger wave equation to different systems,**	**Lecture method**
2	2.10.21	30.10.21	**Approximation method, Variation Theorm, Perturbation Theory, Self Consistent Field Theory** **Concept of distribution, thermodynamic probability & most probable distribution, ensemble averaging, postulates of ensemble averaging, canonical, grand canonical & micro canonical ensembles.**	**Lecture Method**
3	1.11.21	13.11.21	**Ordinary ang. momentum, generalized angular momentum, eigenfunctions for angular momentum, eigcuvalues of angular momentum, using ladder operators, addition of angular-momenta, spin, anti symmetry and Pauli exclusion principle.**	**Lecture Method, Group discussion**

4	15.11.21	30.11.21	**Corresponding distribution laws (using Lagrange's method of undetermined multipliers) Partition functions: Translational, Rotational, Vibrational, Electronic partitions functions. Partial molal proporties, partial molal free energy, volume & heat content and their significance, Determination of these quantities, concept of fugacity and determination of fugacity.**	
5	1.12.21	18.12.21	**Calculation of Thermodynamic properties in terms of partition functions. Heat capacity, behaviour of solids chemical equilibria and equilibrium constant in terms of partition function, F.D. statistics, distribution law and application to metals. Bose Einsteins statistics. Distribution law & application to Helium.** **Non ideal systems, excess functions for non ideal solutions, Activity, Activity coeff, Debye huckel theory for activity coeff. electrolyte solutions, determination of activity & activity coeff, ionic strength. Application of phase rule to 3-component system, second order phase transitions.**	**Lecture Method, Online sources**
6	20.12.21	27.12.21	**Revision and Solution of previous years' question papers**	
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				

7th November, 2021	The teachers have completed the scheduled chapters and topics as shown in the lesson plan
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans	
1th December, 2021	The teachers have completed the scheduled chapters and topics as shown in the lesson plan
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans	
18st December, 2021	The teachers have completed the scheduled chapters and topics as shown in the lesson plan

***Any of these** – (i) Lecture Method; (ii) PPT; (iii) Online Sources; (iv) Group Discussion; (v) Case Studies etc.
Other Methods adopted by the teacher – Please write the specific teaching method

Sample Format (Lesson Plan)

MCM DAV College for Women, Sector – 36A, Chandigarh
Monthly Teaching Plans (Even Semester)
Session – (2021-2022)

Name of the Teacher: Dr. Rishu

Department : P.G. Department of Chemistry

Class: M.Sc I Non-Medical **Subject:** Inorganic Chemistry **Section:**

S.No.	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
1	03-02-2022	26-02-2022	**Electronic Spectra and Magnetic Properties of Transition Metal Complexes-I:** Spectroscopic ground states, correlation, Orgel and Tanabe-Sugano diagrams for transition metal complexes (d 1 -d 9 states), calculations of Dq, B and β parameters, charge transfer spectra, Isopoly and Heteropoly Acids And Salts	Lecture Method, PPT Group Discussion
2	28-02-2022	21-03-2022	**Electronic Spectra and Magnetic Properties of Transition Metal Complexes-II:** Spectroscopic method of assignment of absolute configuration in optically active metal chelates and their stereo chemical information, anomalous magnetic moments, magnetic exchange coupling and spin crossover.	Lecture Method, PPT Group Discussion
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
3	22-03-2022	16-04-2022	**Metal II–Complexes:** Metal carbonyls, structure and bonding, vibrational spectra of metal carbonyls for bonding and structure elucidation, important reaction of metal carbonyls. Preparation, bonding structure and important reactions of transition metal nitrosyl,	Lecture Method and Group Discussion

			dinitrogen and dioxygen complexes, tertiary phosphine as ligand.	
4	18-04-2022	23-05-2022	**Metal Cluster:** Higher boranes, carboranes, metallobranes and metallocarboranes, metal carbonyl and halide clusters, compounds with metal-metal multiple bonds.	Lecture Method and Group Discussion
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
5th March, 2022	The teachers have completed the scheduled chapters and topics as shown in the lesson plan			
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
4th April, 2022	The teachers have completed the scheduled chapters and topics as shown in the lesson plan			
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
29th April, 2022	The teachers have completed the scheduled chapters and topics as shown in the lesson plan			
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
5th May, 2022	The teachers have completed the scheduled chapters and topics as shown in the lesson plan			

***Any of these** – (i) Lecture Method; (ii) PPT; (iii) Online Sources; (iv) Group Discussion; (v) Case Studies etc.
Other Methods adopted by the teacher – Please write the specific teaching method

Lesson Plan

MCM DAV College for Women, Sector – 36A, Chandigarh
Monthly Teaching Plans (Even Semester)
Session – (2021-22)

Name of the Teachers: 1. Dr. Shefali Dhiman
2. Dr. Madhuri Tanaji Patil

Department: P.G. Department of Chemistry

Class: M.Sc I **Subject:** Organic Chemistry 1 (CH-422)

Teacher	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
1.	03-02-2022	26-02-2022	**Unit 1: Reaction Mechanism, Structure and Reactivity:** Types of mechanism, types of reactions, thermodynamics and kinetic requirement. Kinetic & thermodynamics control Hammond's postulate, Curtin-Hammett Principle, Potential energy diagrams, transition states and intermediates, method of determining mechanisms, isotope effects. **Addition to Carbon-Carbon Multiple Bonds** Mechanistic and stereochemical aspects of addition reaction involving electrophiles, nucleophiles and free radicals, regio and chemoselectivity, orientation and reactivity. Addition to cyclopropane ring. Hydrogenation of double and triple bonds, hydrogenation of aromatic ring. Hydroboration. Michael reaction. Sharpless asymmetric epoxidation.	Lecture method & Group discussion about Introduction to good reference books
2.	03-02-2022	26-02-2022	**Unit 3: Free Radical Reactions** Type of free radical reactions, free radical substitution mechanism at an aromatic substrate, neighbouring group assistance.	
1.	28-02-2022	21-03-2022	**Unit 2: Addition To Carbon-Heteroatom Multiple Bonds** Mechanism of metal hydride reduction of saturated and unsaturated carbonyl compounds acids, esters and nitriles. **Unit 2: Addition To Carbon-Heteroatom Multiple Bonds** Mechanism of metal hydride reduction of saturated and unsaturated carbonyl compounds acids, esters and nitriles. Addition of grignard reagents, organozinc and organolithium reagents to carbonyl and unsaturated carbonyl compounds.	Lecture Method & Group Discussion for Importance of reaction mechanism and basics of proper structure drawing
2.	28-02-2022	21-03-2022	**Unit 3: Free Radical Reactions** Reactivity for aliphatic and aromatic substrates at a bridgehead. Reactivity in the attacking radicals. The effect of solvents on reactivity. Allylic halogenation (NBS), oxidation of aldehydes to carboxylic acids, auto-oxidation.	

1.	22-03-2022	16-04-2022	**Unit 2: Addition To Carbon-Heteroatom Multiple Bonds** Wittig reaction. Mechanism of condensation reactions involving enolates-Aldol, Knoevenagel, Claisen, Mannich, Benzoin, Perkin and Stobbe reactions. Hydrolysis of esters and amides, ammonolysis of esters. **Unit 4: Pericyclic Reactions** Molecular orbital symmetry, frontier orbitals of ethylene, 1,3-butadiene, 1, 3, 5-hexatriene and allyl system. Classification of pericyclic reactions. Woodward-Hoffmann correlation diagrams. FMO and PMO approach. Electrocyclic reactions conrotatory and disrotatory motions 4n, 4n +2 and allyl system. Cycloadditions-antarafacial suprafacial additions, 4n and 4n+2 systems, 2+2 additiion of ketenes, 1, 3-dipolar cycloadditions and cheleotropic reactions.	Lecture Method & Assignments and class tests
2.	22-03-2022	16-04-2022	**Unit 3: Free Radical Reaction** Coupling of alkynes and arylation of aromatic compounds by diazonium salts. Sandmeyer reaction. Free Radical Rearrangement. Hunsdiecker reaction. **Unit 3: Elimination Reaction** The E2, E1 and E1cB mechanisms and their spectrum, Orientation of the double bond.	
1.	18-04-2022	10-05-2022	**Unit 4: Pericyclic Reactions** Sigmatropic rearrangements-Suprafacial and antarafacial shifts of H. Sigmatropic shifts involving carbon moieties, [3, 3]-and [5, 5]- sigmatropic rearrangements. Claisen, Cope and aza-Cope rearrangement. Fluxional tautomerism. Ene reaction.	Lecture method & Group discussion Revision and paper solving
2.	11-05-2022	Till exams	**Unit 3: Elimination Reaction** Reactivity effects of substrate structure, attacking base, the leaving group and the medium. Mechanism and orientation in pyrolytic elimination.	
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
5thMarch, 2022	The teachers have completed the scheduled chapters and topics as shown in the lesson plan			
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
4th April, 2022	The teachers have completed the scheduled chapters and topics as shown in the lesson plan			
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
29th April, 2022	The teachers have completed the scheduled chapters and topics as shown in the lesson plan			
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
5th May, 2022	The teachers have completed the scheduled chapters and topics as shown in the lesson plan			

***Any of these** – (i) Lecture Method; (ii) PPT; (iii) Online Sources; (iv) Group Discussion; (v) Case Studies etc. Other Methods adopted by the teacher – Please write the specific teaching method

Lesson Plan

Mehr Chand Mahajan D.A.V. College for Women, Sector – 36A, Chandigarh
Monthly Teaching Plans (2nd Semester)
Session –2021-2022

Name of the Teacher: Dr. Nisha Dawra

Department: Chemistry

Class: M. Sc. Chemistry (2nd Semester) Subject: Physical Chemistry (CH-423)

S. No.	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
1.	03-02-2022	26-02-2022	**Unit-1: Chemical Dynamics:** Methods of determining rate laws, ionic reactions, kinetic salt effects, steady state kinetics, kinetic & thermodynamic control of reactions, treatments of unimolecular reactions, Dynamic chain (pyrolysis of acetaldehyde composition of ethane), **Unit 3: Surface Chemistry**: Adsorption, surface tension, capillary action, Laplace equation, Kelvin equation, Gibb's adsorption isotherm, BET equation.	**Lecture, PPT**
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans 5th April, 2021				
2.	03-02-2022	26-02-2022	**Unit 1: Chemical Dynamics:** Photochemical (H_2-Cl_2) reactions & oscillatory reactions (Belousov-Zhabotinsky reaction), homogeneous catalysis, kinetics of enzyme reactions, general features of fast reactions, Study of fast reactions by flow method, relaxation method, flash photolysis, and NMR method dynamics of molecular motion, probing the transition state,	**Lecture, Online sources**

			dynamics of barrier less chemical reactions in solution **Unit 3: Surface Chemistry**: electro kinetic phenomenon, catalytic activity on surfaces. **Micelles:** Surfactants, classification, micellisation, critical micellisation concentration (CMC), factors affecting CMC, counter ions binding to micelles, thermodynamics of micellization-phase separation, mass action models, solubilization, microemulsions, reverse micelles	
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 3rd May , 2021				
3.	22-03-2022	16-04-2022	**Unit 1: Chemical Dynamics:** Dynamics of unimolecular reaction (Lindemann-Hinshelwood and Rice-Ramsperger-Kassel-Marcus Theories of unimolecular reactions). **Unit 2: Non-equilibrium Thermodynamics:** Thermodynamic criteria for non equilibrium states, entropy production and entropy flow, entropy balance equations for different irreversible processes (eg. heat flow, chemical reaction etc.), Transformation of generalized fluxes and forces, non equilibrium stationary states, phenomenological equators, microscopic reversibility and Onsager's reciprocity relations, electro kinetic phenomenon **Unit 4: Electrochemistry** Electrochemistry of solutions, Debye Huckel Treatment and its extension, ion-solvent interaction, Debye Huckel-Jerum model, Thermodynamics of electrified interface equations, derivation of electro capillarity, Lipmann equations, Methods of determining structures of electrified interface, Guoy-Chapmann, Stern Over potentials.	**Lecture, group discussion and seminar**

Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 7th june, 2021				
4.	18-04-2022	3-05-2022	**Unit 2: (a) Non-equilibrium Thermodynamics:** Diffusion, electrical conduction, irreversible thermodynamics for biological system, coupled reactions. **Unit 2: (b) Macromolecules:** Electrically conducting, fire resistant, liquid crystal polymers, Kinetics of polymerization, Mechanism of polymerization, molecular mass determination (osmometry, viscometry, diffusion & light scattering methods), sedimentation. **Unit 4: Electrochemistry** Exchange current density, Butler Volmer equation, Tafel plots, Quantum aspects of charge transfer at electrode solutions, quantization of charge transfer, Semiconductor interfaces-theory of double layer of interfaces, effects of light at semiconductor solution interface. **Electrocatalysis:** Influence of various parameters, H-electrode, polarography, Ilkovic equation, half wave potential and its significance, electrocardiography.	**Lecture, group discussion and seminar**
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 5th July, 2021				
5.	4-04-2022	Till Exams	**Unit 2: (b) Macromolecules:** Chain configuration of macromolecules, calculation of average dimensions. **Unit 4: Electrochemistry** Introduction to corrosion, homogeneous theory, forms of corrosion, corrosion monitoring.	**Lecture**

***Any of these** – (i) Lecture Method; (ii) PPT; (iii) Online Sources; (iv) Group Discussion; (v) Case Studies etc.
Other Methods adopted by the teacher – Please write the specific teaching method

Sample Format (Lesson Plan)

MCM DAV College for Women, Sector – 36A, Chandigarh
Monthly Teaching Plans (Even Semester)
Session – (2021-22)

Name of the Teacher/s_____Dr. Sagarika Dev_____

Department _____Chemistry_____

Class_M.Sc. I **Subject: Group Theory and spectroscopy**

S.No.	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
1	03-02-2022	26-02-2022	**Symmetry elements & symmetry operation, definitions of group, subgroup, relation between orders of a finite group & its sub groups. Point group symmetry.** **Classification of molecules rigid rotor model, effect of isotopes; non rigid rotor Stark effect, nuclear and electron spin interaction & effect of external field.**	**Lecture method, PPT, Videos from NPTEL**
2	28-02-2022	21-03-2022	**Representations of groups by matrices (representation for the Cn, Cnv, Cnh, Dnh etc. group) character of a representation. The great orthogonality theorem and its importance character tables and there use-in spectroscopy.** **Infrared Spectroscopy:- Linear Harmonic Oscillator, Vibrational energy of diatomic**	**Lecture method, PPT, Videos from NPTEL**

			molecule zero point energy, force constants & bond lengths anharmonicity, morse potential energy diagram. Vibrational rotational spectroscopy, P, Q, R, branches. Selection rules Normal modes of vibration, group frequencies, overtones, hot bands, Raman Vibrational:- Classical & quantum theories of Raman effect pure rotational, vibrational and vibrational. Rotational Raman spectroscopy. Coherent anti stokes Raman spectroscopy	
3	22-03-2022	13-04-2022	**Nuclear Magnetic Resonance Spectroscopy:- Nuclear spin, Nuclear resonance, shielding of magnetic nuclei, chemical shifts deshielding, spin-spin interactions, (ABX, AMX, ABC, A2 B2) spin decoupling.** **Electron Spin resonance spectroscopy:- Basic values factors affecting 'g' value. Measurements, techniques, applications.** **Nuclear Quadrupole Resonance spectroscopy:- Quadrupole Nuclear moments, electic field gradient complex constants applications**	**Lecture Method, Online Sources**
4	14-04-2022	10.05.2022	**Energy levels, molecular orbital, Frank Condon's Principles, electronic spectra of polyatomic molecules emission**	**Lecture Method, Videos from NPTEL**

			spectra; radiative & non radiative decay. Spectra of transition metal complexes; change transfer spectra. **Basic Principles Photoelectric Effect, Ionization Process: Koopman's theorem, photoelectron spectra of simple molecule. Auger electron spectroscopy.** **Bragg's condition, Miller indices. Debye-Scherrer method for structure analysis. Principal and applications of neutron diffraction and electron diffraction**	
5	11.05.2022	Till exams	**Revision and Solution of previous years' question papers**	
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
5thMarch, 2022	The teachers have completed the scheduled chapters and topics as shown in the lesson plan			
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
4th April, 2022	The teachers have completed the scheduled chapters and topics as shown in the lesson plan			
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
29th April, 2022	The teachers have completed the scheduled chapters and topics as shown in the lesson plan			
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
5th May, 2022	The teachers have completed the scheduled chapters and topics as shown in the lesson plan			

***Any of these** – (i) Lecture Method; (ii) PPT; (iii) Online Sources; (iv) Group Discussion; (v) Case Studies etc.
Other Methods adopted by the teacher – Please write the specific teaching method