Lesson Plan

MCM DAV College for Women, Sector – 36A, Chandigarh
Monthly Teaching Plans (Odd Semester)
Session – (2023-24)

Name of the Teacher/s: Dr. Rishu and Dr. Yesbinder

Department: Chemistry

Class: B.Sc III **Subject:** Inorganic Chemistry

S.No.	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
1	21-07-2023	04-08-2023	Ligand Bonding in Transition Metal Complexes Limitations of valence bond theory, an elementary idea of crystal – field theory, crystal field splitting in octahedral, tetrahedral and square planar complexes, factors affecting the crystal – field parameters, Spectro chemical Series.	Lecture Method
2	05-08-2023	18-08-2023	Thermodynamic and Kinetic Aspects of Metal Complexes A brief outline of thermodynamic and Kinetic stability of metal complexes and factors affecting the stability, substitution reactions of square planar complexes	Lecture Method
3	19-08-2023	29-08-2023	Organometallic Chemistry Definition, nomenclature and classification of organometallic compounds. Preparation, properties, bonding .	Lecture Method, assignments and Group Discussion
4	30-08-2023	15-09-2023	Applications of alkyls and aryls of Li, Al , Hg, Sn and Ti, a brief account of metal – ethylenic complexes and homogeneous hydrogenation.	Lecture Method and Group Discussion

5	16-09-2023	25-09-2023	Mononuclear carbonyls and the nature of bonding in metal carbonyls	Lecture Method and Group Discussion
6	26-09-2023	05-10-2023	Bioinoganic Chemistry Essential and trace elements in biological processes,	Lecture Method and Group Discussion
7	06-10-2023	20-10-2023	Metalloporphyrins with special reference to haemoglobin and myoglobin.	
8	21-10-2023	Till exams	Biological role of alkali and alkaline earth metal ions. Nitrogen fixation	
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
30th August, 2023	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 Sept, 2023	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				
31st Oct, 2023	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				
22nd Nov, 2023	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 – (2023-24)

Name of the Teacher/s: Dr. Rishu and Dr. Yesbinder

Department: Chemistry

Class: B.Sc III **Subject:** Inorganic Chemistry

S.No.	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
1	09 -01- 2024	30-01-2024	Silicones and Phosphazenes Silicones and phosphazenes as examples of inorganic polymers, nature of bonding in triphosphazenes.	Lecture Method
2	31.02.2024	27.02.2024	Hard and Soft Acids and Bases Classification of acids and bases as hard and soft Pearson's HSAB concept, acid-base strength and hardness and softness. Symbiosis, theoretical basis of hardness and softness, electronegativity and hardness and softness	Lecture Method
3	28.02.2024	25.03.2024	Electronic Spectra of Transition Metal Complexes Types of electronic transitions, L – S coupling, selection rules for d-d transitions, spectroscopic ground states, Orgel – energy level diagram for d1 and d9states, discussion of the electronic spectrum of [Ti(H2O)6]3+ complex ion	Lecture Method and Group Discussion
4	26.03.2024	Till exam	Magnetic Properties of Transition Metal Complexes	Lecture Method

			Types of magnetic behaviour, methods of determining magnetic susceptibility, spin-only formula. Correlation of μs and μeff values, orbital contribution to magnetic moments, application of magnetic moment data for 3d metal complexes	
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
30-01-2024	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				
24-02-2024	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				
28-03-2024	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				
19-04-2024	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