Lesson Plan

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

Name of the Teacher/s Dr. Rishu

Department Post Graduate Department of Chemistry

Class: B.Sc III Subject: Inorganic Chemistry Section (s): Non Med A, B

S.No.	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
1	11.08.2021	30.08.2021	**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	31.08.2021	29.09.2021	**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	30.09.2021	19.10.2021	**Organometallic Chemistry** Definition, nomenclature and classification of organometallic compounds. Preparation, properties, bonding .	Lecture Method, assignments and Group Discussion
4	20.10.2021	1.11.2021	Applications of alkyls and aryls of Li, Al , Hg, Sn and Ti, a brief account of metal – ethylenic complexes and homogeneous hydrogenation, mononuclear carbonyls and the nature of bonding in metal carbonyls	Lecture Method and Group Discussion

5	2.11.2021	20.11.2021	**Bioinoganic Chemistry** Essential and trace elements in biological processes, metalloporphyrins with special reference to haemoglobin and myoglobin.	Lecture Method and Group Discussion
6	21.11.2021	4.12.2021	Biological role of alkali and alkaline earth metal ions. Nitrogen fixation	Lecture Method and Group Discussion

Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans	
7th September, 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	
5thOctober, 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	
3rd 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	
23rd 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	
4th 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 (Even Semester)
Session – (2021-22)

Name of the Teacher/s Dr. Rishu

Department Post Graduate Department of Chemistry

Class: B.Sc III Sem VI
Subject: Inorganic Chemistry Section (s): Med A, Non Med B

S.No.	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
1	3 -02- 2022	23 -02-2022	**Silicones and Phosphazenes** Silicones and phosphazenes as examples of inorganic polymers, nature of bonding in triphosphazenes.	Lecture Method
2	24.02.2022	15.03.2022	**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	16.03.2022	17.03.2022	**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	18.04.2022	9.05.2022	**Magnetic Properties of Transition Metal Complexes** 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	Lecture Method
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	
4rd 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	
7th May, 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	
15thMay, 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