Lesson Plan

Name of Assistant/Associate Professor: Priti Rani Class and section: B.Sc I

Chemistry Lesson Plan: Week (From January 2024 to April 2024)

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| **Chapter 1 Hydrogen –Bonding &Vander Waal’s Forces** |  |
| * Hydrogen Bonding –Definition
* Types of Hydrogen Bonding
* Effect of Hydrogen Bonding on Properties of Substance
 | Jan , Week3rd |
| * Applications of Hydrogen Bonding
* Brief discussion of various types of Vander Waal’s forces
 | Jan , Week 3rd |
| * Introduction of metallic bond
* Qualitative Idea of Valence Bond theory
* Band theory of metallic bond
 | Jan , Week 4th |
| * Semiconductors-Introduction
* Types & Applications
 | Jan, Week 4th |
| **Chapter 2: S-Block Elements** |  |
| * Comparative study of the element including diagonal Relationship
* Anomalous Behaviour of Li & Bi compared to other Elements in Same Group
* Salient feature of hydrides, Oxides
 | Feb, Week Ist |
| * Salient Feature of Halide And Hydroxide
* Behaviour of Solution in liquid NH3
 | Feb, Week Ist |
| * Solvation
* Complexation tendencies including their function in Bio system
 | Feb , Week 2nd |
| **Chapter 3: Chemistry of Noble Gases** |  |
| * Chemical properties of the noble gases
* Emphasis on their low chemical properties
 | Feb , Week 2nd |
| * Chemistry of xenon
* Structure &bonding of fluoride ,oxides & oxyfluorides of xenon
 | Feb , Week 2nd |
| **Chapter 4: p-Block Elements** |  |
| * Electronic Configuration
* Atomic size & Ionic size
* Metallic Character
* Melting Point
 | Feb, Week 3rd |
| * Ionization Energy
* Electron Affinity
* Electronegativity
 | Feb, Week 3rd |
| * Inert Pair Effect
* Diagonal Relationship
 | Feb,, Week 4th |
| o **Test of Chapter 1 And 2** |  |
| * Diborane
* Properties & Structure of Diborane
* Borazine & its structure
* Chemical properties of Borazine
 | Mar, Week Ist |
| o Trihalides of Boron | Mar, Week 2nd |

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| * Relative Strength of Trihalides of Boron as Lewis Acid
* Structure of Aluminium (III) Chloride
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| * Catenation
* Carbides
* Fluoro Carbons
 | Mar, Week 2nd |
| * Silicates
* Types and Structure of Silicates
 | Mar, Week 3rd |
| * Silicones –General methods of preparations
* Properties & its uses
 | Mar, Week 3rd |
| * Oxides-structure of oxides of N & P
* Oxoacids –Structure & relative acid Strength of Oxoacids of N & P
 | Mar,, Week 4th |
| o Structure of white ,yellow & Red phosphorous |  |
| * Oxoacids of Sulphur
* Structure & Acid strength
 | Mar, Week 4th |
| * H2O2
* Properties and Uses
 | April, Week Ist |
| o Basic Properties of Halogens |  April,, Week Ist |
| * Interhalogen Compound
* Their Types and Structure
 |  April , Week 2nd |
| * Hydra and Oxy Acids of Chlorine
* Structure and Acidic Strength
 | April, Week 2nd |
| o Cationic Nature of Iodine | April,, Week 3rd |
| o Problems From S-block and P-block Elements | April , Week 3rd |
| o Revision |  |
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