

## Lesson Plan

C.R.D.A.V. GIRLS COLLEGE, ELLENABAD

Name of Assistant Professor: Dr. Vishal Saini

Class: B.Sc-I, Sem-II, Subject: CHEMISTRY

| WEEK | DATE               | TOPICS COVERED   |
|------|--------------------|--|
| 1    | 1-JAN 2018         | <b>INORGANIC CHEMISTRY</b>                                   |
|      |                    | Hydrogen Bonding- Definition, Types and Effects              |
|      | 2-JAN 2018         | Effects and Applications of Hydrogen Bonding                 |
|      | 3-JAN 2018         | Reasoning questions based on Hydrogen Bonding                |
|      | 4-JAN 2018         | Vanderwall Force and effects on properties                   |
|      | 5-JAN 2018         | Metallic Bond :VBT, Effects                                  |
|      | 6-JAN 2018         | Band Theory  |
|      | <b>7-JAN 2018</b>  | <b>SUNDAY</b>  |
| 2    | 8-JAN 2018         | Semiconductors, Types and Applications                       |
|      | 9-JAN 2018         | Brief Revision of Chapter                                    |
|      | 10-JAN 2018        | Class Test   |
|      | 11-JAN 2018        | General Characteristics of S-block elements group-1          |
|      | 12-JAN 2018        | Chemical Characteristics of S-block elements group-1         |
|      | 13-JAN 2018        | Anomalous behavior of Li                                     |
|      |                    | <b>14-JAN 2018</b>   |
| 3    | 15-JAN 2018        | General Characteristics of S-block elements group-2          |
|      | 16-JAN 2018        | Chemical Characteristics of S-block elements group-2         |
|      | 17-JAN 2018        | Anomalous behavior of Be and Comparative study of Gp-1 and 2 |
|      | 18-JAN 2018        | Reasoning Questions Based on Group Characteristics           |
|      | 19-JAN 2018        | Solvation, behavior in liquid ammonia                        |
|      | 20-JAN 2018        | Complex formation, Crown ether and Cryptates                 |
|      |                    | <b>21-JAN 2018</b>   |
| 4    |                    | <b>VASANT PANCHAMI</b>                                       |
|      | <b>22-JAN 2018</b> |  |
|      | 23-JAN 2018        | Class Test   |
|      | <b>24-JAN 2018</b> | <b>Sir Chhotu Ram Jayanti</b>                                |
|      | 25-JAN 2018        | Discovery and General Characteristics of Noble gases         |
|      | <b>26-JAN 2018</b> | <b>Republic Day</b>  |
|      | 27-JAN 2018        | Compounds of Noble Gases Reasoning based Questions           |
|      | <b>28-JAN 2018</b> | <b>SUNDAY</b>  |
| 5    | 29-JAN 2018        | General Characteristics of p-Block Elements                  |
|      | 30-JAN 2018        | Gp-13 Characters , Diborane                                  |
|      | 31-JAN 2018        | Borazine and Aluminum Chloride                               |

| WEEK | DATE               | TOPICS COVERED   |
|------|--------------------|--|
| 1    | 1-Feb 2018         | Gp-14 Characters , Carbides and Fluorocarbons  |
|      | 2-Feb 2018         | Silicates and Silicons   |
|      | 3-FEB2018          | Gp-15 Characters , Oxides of N and P   |
|      | <b>4-FEB 2018</b>  | <b>SUNDAY</b>  |
| 2    | 5-FEB 2018         | Oxyacids of P and N, Allotropic form of P  |
|      | 6-FEB 2018         | Gp-16 Characters , Oxides and Oxyacids of S  |
|      | 7-FEB2018          | Hydrogen Peroxides   |
|      | 8-FEB 2018         | Gp-17 Characters , Oxides and Oxyacids of Cl   |
|      | 9-FEB 2018         | Interhalogen Compounds Brief Revision of Chapter,<br>ASSIGNMENT-1 ALLOTTED TO STUDENTS       |
|      | <b>10-FEB 2018</b> | <b>Maharishi Dayanand Saraswati Jayanti</b>  |
|      | <b>11-FEB 2018</b> | <b>SUNDAY</b>  |
| 3    | 12-FEB 2018        | Class Test   |
|      | 13-FEB 2018        | <b>PHYSICAL CHEMISTRY</b><br>Introduction, Rate of reaction, types of rate, factor affecting |
|      | 14-FEB 2018        | Arrhenius equation, role of Catalyst on Rate with Graphical representation                   |
|      | 15-FEB 2018        | Collision Theory   |
|      | 16-FEB 2018        | Transition State Theory, Comparison of both theories   |
|      | 17-FEB 2018        | Molecularity, Order, Rate Equation, Rate Constant  |
|      | <b>18-FEB 2018</b> | <b>SUNDAY</b>  |
| 4    | 19-FEB 2018        | Rate Expression of Zero and First Order and Characteristics                                  |
|      | 20-FEB 2018        | Examples of First Order Reactions and Pseudo-first order reaction                            |
|      | 21-FEB 2018        | Rate Expression of second order and examples   |
|      | 22-FEB 2018        | Rate Expression of third order, Methods to determine order of reaction                       |
|      | 23-FEB 2018        | Numericals   |
|      | 24-FEB 2018        | Revision of Chapter  |
|      | <b>25-FEB 2018</b> | <b>SUNDAY</b>  |
| 5    | 26-FEB 2018        | Revision of Chapter, Assignment –II allotted   |
|      | 27-FEB 2018        | Seasonal Test  |
|      | <b>28-FEB 2018</b> | <b>Science Day Celebration</b>   |

| WEEK | DATE               | TOPICS COVERED   |
|------|--------------------|--|
| 1    | 1-MAR 2018         | Query Discussion   |
|      | <b>2-MAR 2018</b>  | <b>HOLI</b>  |
|      | <b>3-MAR2018</b>   | <b>Holiday</b>   |
|      | <b>4-MAR 2018</b>  | <b>SUNDAY</b>  |
| 2    | 5-MAR 2018         | Introduction, Ionization and factors, Arrhenius Theory of Ionization, Strong and Weak electrolyte                |
|      | 6-MAR 2018         | Ostwald Dilution law and Numericals  |
|      | 7-MAR2018          | Types of conductance, Variation with concentration, Numericals   |
|      | 8-MAR 2018         | Kohlrausch's Law and Applications with numerical   |
|      | 9-MAR 2018         | Debye Huckel Theory  |
|      | 10-MAR 2018        | Comparison of Theories and Revision  |
|      | <b>11-MAR 2018</b> | <b>SUNDAY</b>  |
| 3    | 12-MAR 2018        | EMF of Cell, Electrode potential determination, Electrochemical Series   |
|      | 13-MAR 2018        | Numerical of Electrochemical Series  |
|      | 14-MAR 2018        | Nernst Equation and its applications   |
|      | 15-MAR 2018        | Gibbs free energy and equilibrium constant   |
|      | 16-MAR 2018        | Numericals   |
|      | 17-MAR 2018        | Solubility and Solubility product and Numericals   |
|      | <b>18-MAR 2018</b> | <b>SUNDAY</b>  |
| 4    | 19-MAR 2018        | pH and Numericals  |
|      | 20-MAR 2018        | Buffer Solution, Types, pH of Buffer and Numericals  |
|      | 21-MAR 2018        | Salt Hydrolysis, Conductometric titrations   |
|      | 22-MAR 2018        | Applications of Conductance measurements   |
|      | <b>23-MAR 2018</b> | <b>Shaheedi Diwas</b>  |
|      | 24-MAR 2018        | Revision of Chapter  |
|      | <b>25-MAR 2018</b> | <b>SUNDAY</b>  |
| 5    | 26-MAR 2018        | <b>ORGANIC CHEMISTRY</b><br>Aromaticity, Huckel Rule, Examples, Aromatic, nonaromatic and antiaromatic compounds |
|      | 27-MAR 2018        | Aromatic Electrophilic Substitution Reactions with Mechanisms  |
|      | 28-MAR 2018        | Energy Profile Diagrams  |
|      | 29-MAR 2018        | <b>MAHAVEER JAYANTI</b>  |
|      | 30-MAR 2018        | Activation, Deactivation and Orientation   |
|      | 31-MAR 2018        | Problems Related   |

| WEEK | DATE               | TOPICS COVERED  |
|------|--------------------|---|
| 1    | 1-APR 2018         | <b>SUNDAY</b>   |
|      | 2-APR 2018         | Dienes;Nomenclature, clasification, conjugation, Structure of butadiene |
|      | 3-APR2018          | Chemicals Reactions of 1,2 and 1,4 addition , Diels Alder Reaction      |
|      | 4-APR 2018         | Alkyne Nomenclature, Bonding, Formation                                 |
| 2    | 5-APR 2018         | Chemical Reactions of Alkyne and Acidic Character                       |
|      | 6-APR 2018         | Mechanism of Electrophilic and Nucleophilic addition reactions          |
|      | 7-APR2018          | Revision of Chapter   |
|      | <b>8-APR 2018</b>  | <b>SUNDAY</b>   |
|      | 9-APR 2018         | Nomenclature, Classification and Preperation of Alkyl Halide            |
|      | 10-APR 2018        | Chemical Reactions and Stereochemistry of SN reactions                  |
|      | 11-APR 2018        | Energy Profile Diagrams and comparision of SN1 and SN2                  |
| 3    | 12-APR 2018        | Methods of Formation of Aryl halides, Reasoning Questions               |
|      | 13-APR 2018        | Chemical Reactions of Aryl HALide                                       |
|      | <b>14-APR 2018</b> | <b>Dr. Ambedkar Jayanti</b>   |
|      | <b>15-APR 2018</b> | <b>SUNDAY</b>   |
|      | 16-APR 2018        | Addition Elimination and Elimination addition reactions                 |
|      | 17-APR 2018        | Reactivity of alkyl, vinyl, allyl and aryl halides                      |
|      | <b>18-APR 2018</b> | <b>Parashu Rama Jayanti</b>   |
| 4    | 19-APR 2018        | Reasoning Questions   |
|      | 20-APR 2018        | Revision  |
|      | 21-APR 2018        | Revision  |
|      | <b>22-APR 2018</b> | <b>SUNDAY</b>   |
|      | 23-APR 2018        | Class Test  |
|      | 24-APR 2018        | Revision  |
|      | 25-APR 2018        | Revision  |
| 5    | 26-APR 2018        | Revision  |
|      | 27-APR 2018        | Revision  |
|      | 28-APR 2018        | Revision  |
|      | <b>29-APR 2018</b> | <b>SUNDAY</b>   |
|      | 30-APR 2018        | Revision  |