# Post Graduate Government College for Girls, Sector-42, Chandigarh

Teaching Plan for Bachelors (Third Semester)

# Session (2020-2021)

Class: BSc II Medical & Electives Name of the Teacher: Dr Seema Gupta BSc II Non-Medical

Subject: Chemistry Paper: Organic Chemistry Inorganic Chemistry

|  |  |  |
| --- | --- | --- |
| **S. No** | **Dates** | **Topics to be Covered** |
| Week 1 | 03/08/2020 – 08/08/2020 | Classification & Nomenclature of Alcohol, Monohydric Alcohol |
| Week 2 | 10/08/2020 – 14/08/2020 | Dihydric alcohol |
| Week 3 | 17/08/2020 – 22/08/2020 | Trihydric Alcohol& Revision |
| Week 4 | 24/08/2020 – 29/08/2020 | Phenols Preparation |
| Week 5 | 31/08/2020- 05/09/2020 | Phenols Physical Properties & Acidic Character |
| Week 6 | 07/09/2020- 12/09/2020 | Chemical Properties of Phenols |
| Week 7 | 14/09/2020- 19/09/2020 | Nomenclature & Structure of Carbonyl Group |
| Week 8 | 21/09/2020- 26/09/2020 | Synthesis of Aldehydes & Ketones |
| Week 9 | 28/09/2020- 03/10/2020 | Physical properties of Aldehydes & Ketones& Revision |
| Week 10 | 05/10/2020- 10/10/2020 | Reactivities of Aldehydes & Ketones |
| Week 11 | 12/10/2020- 16/10/2020 | Reactions of Aldehydes & Ketones |
| Week 12 | 19/10/2020- 24/10/2020 | Carboxylic Acids, Nomenclature structure & Bonding |
| Week 13 | 27/10/2020- 30/10/2020 | Carboxylic Acid-Physical Properties & acidic Nature |
| Week 14 | 03/11/2020- 07/11/2020 | Synthesis & Chemical Reactions of Carboxylic Acid |
| Week 15 | 09/11/2020- 12/11/2020 | Werner’s Co-ordination Theory, EAN, Chelates |
| Week 16 | 16/11/2020- 21/11/2020 | Valence Bond Theory of Transition Metal Complexes |
| Week 17 | 23/11/2020- 28/11/2020 | Chemistry of elements of Second Transition series |

**Class: BSc II Medical & Electives**  **Name of the Teacher: Ms. Puneet Jyoti**

**BSc II Non-Medical**

**Subject: Chemistry Paper: Physical Chemistry**

**Inorganic Chemistry**

|  |  |  |
| --- | --- | --- |
| **S. No** | **Dates** | **Topics to be Covered** |
| Week 1 | 03/08/2020 – 08/08/2020 | Liquid State |
| Week 2 | 10/08/2020 – 14/08/2020 | Liquid Crystals |
| Week 3 | 17/08/2020 – 22/08/2020 | LCD & Thermography |
| Week 4 | 24/08/2020 – 29/08/2020 | Chemical Equilibrium |
| Week 5 | 31/08/2020- 05/09/2020 | Le- Chaterlier’s Principle |
| Week 6 | 07/09/2020- 12/09/2020 | Thermodynamics –II |
| Week 7 | 14/09/2020- 19/09/2020 | Carnot Cycle & Theorem |
| Week 8 | 21/09/2020- 26/09/2020 | Clausius Inequality & Entropy |
| Week 9 | 28/09/2020- 03/10/2020 | Numericals of thermodynamics-II |
| Week 10 | 05/10/2020- 10/10/2020 | Thermodynamics-III |
| Week 11 | 12/10/2020- 16/10/2020 | Work function & Gibb’s Free Energy |
| Week 12 | 19/10/2020- 24/10/2020 | Nernst Heat Theorem & Criteria of Spontaneity |
| Week 13 | 27/10/2020- 30/10/2020 | Numericals of Thermodynamics-III |
| Week 14 | 03/11/2020- 07/11/2020 | Co-ordination Compounds & Nomenclature |
| Week 15 | 09/11/2020- 12/11/2020 | Isomerism in Co-ordination Compounds |
| Week 16 | 16/11/2020- 21/11/2020 | Magnetic Properties of Co-ordination Compounds |
| Week 17 | 23/11/2020- 28/11/2020 | Chemistry of elements of third Transition series |

**Post Graduate Government College for Girls, Sector-42, Chandigarh**

**Teaching Plan for Bachelors (Fifth Semester)**

**Session (2020-2021)**

**Class: BSc III**   **Name of the Teacher: Prof. Deepika Kansal**

**Subject: Chemistry Paper: Physical Chemistry**

|  |  |  |
| --- | --- | --- |
| **S. No** | **Dates** | **Topics to be Covered** |
| Week 1 | 03/08/2020 – 08/08/2020 | Fluoroscence, Phosphorescence **Section-A& B** |
| Week 2 | 10/08/2020 – 14/08/2020 | Laws of Photochemistry **Section A& B** |
| Week 3 | 17/08/2020 – 22/08/2020 | Photochemical Reactions, Quantum Yield **Section A& B** |
| Week 4 | 24/08/2020 – 29/08/2020 | Jablonski Diagram, Photoinhibitors **Section A& B** |
| Week 5 | 31/08/2020- 05/09/2020 | Valence Bond Theory, Crystal-Field Theory **Section A& B** |
| Week 6 | 07/09/2020- 12/09/2020 | Tetrahedral & Square Planner Complexes **Section A& B** |
| Week 7 | 14/09/2020- 19/09/2020 | Spectro Chemical Series **Section A& B** |
| Week 8 | 21/09/2020- 26/09/2020 | Conducting PU Exams |
| Week 9 | 28/09/2020- 03/10/2020 | Conducting PU Exams |
| Week 10 | 05/10/2020- 10/10/2020 | Thermodynamic & Kinetic Aspects of Metal Complexes  **Section A** |
| Week 11 | 12/10/2020- 16/10/2020 | Thermodynamic & Kinetic Aspects of Metal Complexes  **Section B** |
| Week 12 | 19/10/2020- 24/10/2020 | Substitution Reaction of Square Planner Complexes  **Section A** |
| Week 13 | 27/10/2020- 30/10/2020 | Substitution Reaction of Square Planner Complexes  **Section B** |
| Week 14 | 03/11/2020- 07/11/2020 | Quantum Chemistry II **Section A** |
| Week 15 | 09/11/2020- 12/11/2020 | Quantum Chemistry II **Section B** |
| Week 16 | 16/11/2020- 21/11/2020 | Coefficients of Atomic Orbital **Section A & B** |
| Week 17 | 23/11/2020- 28/11/2020 | Test & Revision **Section A & B** |

**Class: B.Sc-III**  **Name of the Teacher: Dr. Rajendra Swain**

**Subject: Chemistry Paper: Organic Chemistry and Inorganic Chemistry.**

|  |  |  |
| --- | --- | --- |
| **S. No** | **Dates** | **Topics to be Covered** |
| Week 1 | 03/08/2020 – 08/08/2020 | Carbohydrates, Section-A |
| Week 2 | 10/08/2020 – 14/08/2020 | Carbohydrates, Section-B |
| Week 3 | 17/08/2020 – 22/08/2020 | Ultraviolet Spectroscopy, Section-A |
| Week 4 | 24/08/2020 – 29/08/2020 | Ultraviolet Spectroscopy, Section-B |
| Week 5 | 31/08/2020- 05/09/2020 | Infrared Spectroscopy, Section-A |
| Week 6 | 07/09/2020- 12/09/2020 | Infrared Spectroscopy, Section-B |
| Week 7 | 14/09/2020- 19/09/2020 | Nuclear Magnetic Resonance Spectroscopy, Section-A |
| Week 8 | 21/09/2020- 26/09/2020 | Nuclear Magnetic Resonance Spectroscopy, Section-B |
| Week 9 | 28/09/2020- 03/10/2020 | Organometallic Chemistry, Nomenclature, Classification ,preparations, properties, bonding and applications of alkyl and aryl of Li, Al and Hg. Sec-A |
| Week 10 | 05/10/2020- 10/10/2020 | Organ metallic Chemistry, Nomenclature, Classification ,preparations, properties, bonding and applications of alkyl and aryl of Li, Al and Hg. Sec-B |
| Week 11 | 12/10/2020- 16/10/2020 | Preparations, properties, bonding and applications of alkyl and aryl of Sn and Ti. Metal ethylene complex, homogeneous hydrogenation and bonding in metal carbonyls. Sec-A |
| Week 12 | 19/10/2020- 24/10/2020 | Preparations, properties, bonding and applications of alkyl and aryl of Sn and Ti. Metal ethylene complex, homogeneous hydrogenation and bonding in metal carbonyls. Sec-B |
| Week 13 | 27/10/2020- 30/10/2020 | Bioinorganic Chemistry, Sec-A |
| Week 14 | 03/11/2020- 07/11/2020 | Bioinorganic Chemistry,Sec-B |
| Week 15 | 09/11/2020- 12/11/2020 | Revision of section A |
| Week 16 | 16/11/2020- 21/11/2020 | Revision of section B |
| Week 17 | 23/11/2020- 28/11/2020 | Test of section Aand B. |