

Academic Calender

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Department of Chemistry

Name of the teacher - Rajeshwari Jaiswal

Session -2020-23 (Sem-1)

<u>Months</u>	<u>Lesson Plan</u>	<u>Status</u>
<u>July 2021</u>	<u>C.C-1</u> - 1) Atomic Structure. 2) Periodicity of Elements <u>C.C-2</u> 1) Gaseous state 2) Liquid state	Completed
<u>August 2021</u>	<u>C.C-1</u> 1) Chemical Bonding 2) Oxidation - Reduction <u>C.C-2</u> 1) Solid state 2) Ionic equilibria	Completed
<u>September 2021</u>	<u>C.C-1</u> 1) Titrimetric analysis 2) Acid base titrations <u>C.C-2</u> 1) pH metry 2) Surface tension measurement 3) Viscosity measurement	Completed

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Session - 2020-23 (Sem-2)

Months	Lesson Plan	Status
<u>October 2021</u> to <u>December 2021</u>	<u>C.C-3</u> - 1) Basics of Organic Chemistry 2) Stereochemistry 3) Chemistry of Aliphatic Hydrocarbons. <u>C.C-4</u> - 1) Chemical Thermodynamics 2) Systems of Variable Compositions. 3) Thermochemistry practical 4) Solubility of benzoic acid.	Completed
<u>January 2022</u> to <u>February 2022</u>	<u>C.C-3</u> - 1) Cycloalkanes and Conformational analysis 2) Aromatic Hydrocarbons 3) Calibration, Purification, 4) Chromatography, B.P, M.P <u>C.C-4</u> - 1) Chemical Equilibrium 2) Solutions & Colligative Properties. 3) Calculation of enthalpy 4) Det ⁿ of heat capacity.	Completed

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Session - 2020-23 (Sem-3)

Months	Lesson Plan	Status
<u>April 2022</u>	<u>C.C-5</u> - 1) Metallurgy 2) Acids and Bases <u>C.C-6</u> - 1) Chemistry of halogenated hydrocarbons <u>C.C-7</u> - 1) Phase Equilibria 2) Adsorption lab. 3) Organic lab	Completed
<u>May 2022</u>	<u>C.C-5</u> - 1) Chemistry of s and p block elements 2) Noble gases <u>C.C-6</u> - 1) Alcohols, Phenols, Ether. 2) Carbonyl Compound <u>C.C-7</u> 1) Chemical Kinetics 2) Organic Preparation	Completed
<u>June 2022</u>	<u>C.C-5</u> - 1) Inorganic Polymers <u>C.C-6</u> 1) Carboxylic acid & derivative 2) Sulphur containing compound <u>C.C-7</u> - 1) Catalysis 2) Surface Chemistry 3) Inorganic Preparation.	Completed

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Session - 2021-24 (Sem-1)

Months	Lesson Plan	Status
<u>Nov 2021</u> to <u>March 2022</u>	<u>C.C-1-1</u>) Atomic Structure 2) Periodicity of elements 3) Electronegativity 4) Effective nuclear charge 5) Ionization enthalpy 6) Chemical bonding	Completed
<u>April 2022</u> to <u>August 2022</u>	<u>C.C-1-1</u>) Ionic bond 2) Covalent bond 3) Metallic bond 4) Weak chemical forces. 5) Titrimetric analysis 6) Acid-base titration. 7) Oxi ^m -Red ^m titrimetry.	Completed
<u>Sep 2022</u>	<u>C.C-1-1</u>) Oxidation-Reduction 2) General principles of metallurgy.	Completed

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Session - 2019-22 (Sem-3)

Months	Lesson Plan	Status
<u>July 2021</u> to <u>Aug 2021</u>	<u>C.C-5-1)</u> General principles of Metallurgy 2) Acids & bases 3) Chemistry of s and p block elements 4) Noble gases 5) Inorganic Polymers. 6) Iodo / Iodimetric titrations. 7) Inorganic Preparations.	Completed
<u>Sep 2021</u> to <u>Oct 2021</u>	<u>C.C-6-1)</u> Chemistry of halogenated hydrocarbons. 2) Alcohol, Phenol, Ether & epoxide 3) Carbonyl compound. 4) Carboxylic acid & derivatives 5) Sulphur containing compound. 6) Functional group test 7) Organic preparations.	Completed
<u>Nov 2021</u>	<u>C.C-7-1)</u> Phase equilibria 2) Chemical kinetics 3) Catalysis 4) Surface Chemistry 5) Physical practical	Completed

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2019-22 (Sem-4)

Months	Lesson Plan	Status
Dec 2021 to Feb 2022	<u>C.C-8-1</u>) Coordination Chemistry 2) Transition elements 3) Lanthanoids & actinoids 4) Bioinorganic Chemistry 5) Gravimetric analysis 6) Inorganic preparations 7) Chromatography of metal ions	Completed
March 2022 to May 2022	<u>C.C-9-1</u>) Nitrogen containing functional groups 2) Polynuclear hydrocarbons 3) Heterocyclic compounds 4) Alkaloids 5) Terpenes 6) C-9 lab. 7) $\rightarrow \leftarrow$	Completed
June 2022	<u>C.C-10-1</u>) Conductance 2) Electrochemistry 3) Electrical & magnetic properties of atoms & molecules 4) Conductometry & Potentiometry <u>SEC-2-1</u>) Fuel Chemistry	Completed

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2018-21 (Sem-5)

Months	Lesson Plan	Status
<u>July 2021</u>	<p><u>C-11</u> - 1) Nucleic acids 2) Amino acids, peptide & protein 3) Enzymes 4) Lipids 5) Concept of energy in biosystem 6) C-11 - lab.</p> <p><u>C-12</u> - 1) Quantum chemistry 2) Molecular spectroscopy 3) Photochemistry 4) C-12 - lab.</p>	Completed
<u>August 2021</u>	<p><u>DSE-1</u> - 1) Qualitative & quantitative aspects of analysis 2) Optical methods of analysis 3) Thermal methods of analysis 4) Electroanalytical methods 5) Separation techniques. 6) DSE-1 - lab.</p> <p><u>DSE-2</u> - 1) Introduction & history of polymeric materials 2) Functionality & its importance 3) Kinetics of polymerization 4) Crystallization & crystallinity 5) DSE-2 - lab.</p>	Completed

Date	Lesson Plan	Status
<u>Sep 2021</u>	<p><u>C-13</u> - 1) Theoretical principles in qualitative analysis 2) Organometallic compounds 3) Reaction kinetics & mechanism 4) Catalysis by organometallic compounds. 5) C-13 - lab</p> <p><u>C-14</u> - 1) Organic spectroscopy 2) Carbohydrates 3) Dyes 4) Polymer 5) C-14 - lab</p>	Completed
<u>Oct 2021</u>	<p><u>DSE-3</u> - 1) Introduction to green chemistry 2) Principles of G.C 3) Examples of G.C 4) Future trends in G.C. 5) DSE-3 - lab.</p> <p><u>DSE-4</u> - 1) Industrial gases & inorganic chemicals. 2) Industrial metallurgy 3) Environment & its segment. 4) DSE-4 lab.</p>	Completed