



## Lesson Plan (2024-25)

TEACHER: DR. TAPAS KUMAR ADALDER (ORGANIC CHEMISTRY)

## UG SEMESTER-I

PAPER: CEMHMJ-101T [MAJOR, (CCFUP)] (ORGANIC CHEMISTRY-I), Stereochemistry I (20 Lectures)

PERIOD	TOPIC(S) TO BE COVERED
October 2024	Valence Bond Theory
November 2024	Electronic displacements
December 2024	MO theory
January 2024	Previous year question solve, Class test

## UG SEMESTER-II

PAPER: CEMMI-2T [MINOR, (CCFUP)] (SECTION-A, ORGANIC CHEMISTRY-I)

PERIOD	TOPIC(S) TO BE COVERED
February 2025	Fundamentals of Organic Chemistry
March 2025	Fundamentals of Organic Chemistry
April 2025	Physical Effects, Electronic Displacements
May 2025	Alkenes and Alkynes

## UG SEMESTER-III

PAPER: CC-7T (ORGANIC CHEMISTRY-III), Chemistry of alkenes and alkynes &amp; Organometallics

PERIOD	TOPIC(S) TO BE COVERED
August 2022	Addition to C=C
September 2022	Addition to C≡C
October 2022	Grignard reagent
November 2022	Previous year question solve, Class test

PAPER: GE-3T (SECTION-B, ORGANIC CHEMISTRY-II)

PERIOD	TOPIC(S) TO BE COVERED
September 2022	Organometallic Compounds
October 2022	Alcohols, Phenols
November 2022	Carbonyl Compounds

PAPER: GE-3P (SECTION-B, ORGANIC CHEMISTRY LAB)

PERIOD	TOPIC(S) TO BE COVERED
September 2022	Identification of a pure organic compound
October 2022	Identification of a pure organic compound
November 2022	Identification of a pure organic compound

## UG SEMESTER-IV

PAPER: CC-10T (ORGANIC CHEMISTRY-IV), Nitrogen compounds

PERIOD	TOPIC(S) TO BE COVERED
February 2023	Amines
March 2023	Nitro compounds
April 2023	Alkyl nitrile and isonitrile, Class tests
May 2023	Diazonium salts and their related compounds, Previous year question solve



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**UG SEMESTER-V****PAPER: CC-12T (ORGANIC CHEMISTRY-V): Carbocycles and Heterocycles**

PERIOD	TOPIC(S) TO BE COVERED
July 2022	Polynuclear hydrocarbons and their derivatives
August 2022	Polynuclear hydrocarbons and their derivatives
September 2022	Previous year question solve, Class tests

**UG SEMESTER-VI****PAPER: DSE-4T Polymer Chemistry**

PERIOD	TOPIC(S) TO BE COVERED
February 2023	Introduction and history of polymeric materials
March 2023	Crystallization and crystallinity, Class Test
April 2023	Properties of Polymer, Previous year question solve, Practice



## Lesson Plan (2024-25)

**PG SEMESTER-I****PAPER: CEM 102 (ORGANIC CHEMISTRY):**

PERIOD	TOPIC(S) TO BE COVERED
October 2022	Unit-4: Natural Products - Alkaloids
November 2022	Unit-4: Natural Products - Alkaloids
December 2022	Unit-5: Retrosynthetic analysis-I

**PG SEMESTER-II****PAPER: CEM 204 (Nanotechnology: Principles and Practices)**

PERIOD	TOPIC(S) TO BE COVERED
February 2023	Unit-1 & 2: Introduction, Synthesis of Nanomaterials
March 2023	Unit-3: Analysis techniques
April 2023	Unit-4: Application of Nanotechnology

**PG SEMESTER-III****PAPER: CEM 303 (ORGANIC CHEMISTRY SPECIALIZATION):**

PERIOD	TOPIC(S) TO BE COVERED
September 2022	Unit 01: Bioorganic and Supramolecular Chemistry-I
October 2022	Unit 03: Bioorganic and Supramolecular Chemistry-III
November 2022	Unit 03: Bioorganic and Supramolecular Chemistry-III

**PAPER: CEM 304 (ORGANIC CHEMISTRY SPECIALIZATION):**

PERIOD	TOPIC(S) TO BE COVERED
September 2022	Unit-05: Antimalarial drugs
October 2022	Unit-05: Antimalarial drugs

**PAPER: CEM 395 (ORGANIC CHEMISTRY SPECIALIZATION):**

PERIOD	TOPIC(S) TO BE COVERED
September 2022 – December 2022 (16 weeks)	Project work

**PG SEMESTER-IV****PAPER: CEM 403 (ORGANIC CHEMISTRY SPECIALIZATION):**

PERIOD	TOPIC(S) TO BE COVERED
February 2023	Unit- 04: Stereochemistry-VI
March 2023	Unit- 04: Stereochemistry-VI
April 2023	Unit- 04: Stereochemistry-VI, Class test

**PAPER: CEM 404 (ORGANIC CHEMISTRY SPECIALIZATION):**

PERIOD	TOPIC(S) TO BE COVERED
February 2023	Unit-03: Science and technology of Cereal Processing
March 2023	Unit-03: Science and technology of Cereal Processing

**PAPER: CEM 495 (ORGANIC CHEMISTRY SPECIALIZATION):**

PERIOD	TOPIC(S) TO BE COVERED
February 2023 – May 2023 (16 weeks)	Project work