

### TEACHER: DR. TAPAS KUMAR ADALDER (ORGANIC CHEMISTRY)

### **UG SEMESTER-I**

## PAPER: CC-1T (ORGANIC CHEMISTRY-I), Bonding and Physical Properties (25 Lectures)

PERIOD	TOPIC(S) TO BE COVERED
October 2021	Valence Bond Theory
November 2021	Electronic displacements
December 2021	MO theory
January 2021	Previous year question solve, Class test

### PAPER: CC-1P (CHEMISTRY LAB-I)

PERIOD	TOPIC(S) TO BE COVERED
December 2021	Determination of boiling point
January 2021	Identification of a Pure Organic Compound

### PAPER: GE-1T (SECTION-B: ORGANIC CHEMISTRY-I)

PERIOD	TOPIC(S) TO BE COVERED
October 2021	Nucleophilic Substitution and Elimination Reactions
November 2021	Alkenes
December 2021	Alkynes

### **UG SEMESTER-II**

### PAPER: CC-4T (ORGANIC CHEMISTRY-II), General Treatment of Reaction Mechanism II

PERIOD	TOPIC(S) TO BE COVERED
February 2022	Reaction thermodynamics
March 2022	Reaction kinetics, Class Test
April 2022	Previous year question solve, Practice

### UG SEMESTER-III

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

PERIOD	TOPIC(S) TO BE COVERED
August 2021	Addition to C=C
September 2021	Addition to C≡C
October 2021	Grignard reagent
November 2021	Previous year question solve, Class test

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

PERIOD	TOPIC(S) TO BE COVERED
September 2021	Organometallic Compounds
October 2021	Alcohols, Phenols
November 2021	Carbonyl Compounds

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

PERIOD	TOPIC(S) TO BE COVERED
September 2021	Identification of a pure organic compound
October 2021	Identification of a pure organic compound
November 2021	Identification of a pure organic compound



# Lesson Plan (2021-22)

### **UG SEMESTER-IV**

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

PERIOD	TOPIC(S) TO BE COVERED
February 2022	Amines
March 2022	Nitro compounds
April 2022	Alkylnitrile and isonitrile, Class tests
May 2022	Diazonium salts and their related compounds, Previous year question solve

# **UG SEMESTER-V**

### PAPER: CC-12T (ORGANIC CHEMISTRY-V): Carbocycles and Heterocycles

PERIOD	TOPIC(S) TO BE COVERED	
July 2021	Polynuclear hydrocarbons and their derivatives	
August 2021	Polynuclear hydrocarbons and their derivatives	
September 2021	Previous year question solve, Class tests	

# **UG SEMESTER-VI**

### PAPER: DSE-4T Polymer Chemistry

PERIOD	TOPIC(S) TO BE COVERED
February 2022	Introduction and history of polymeric materials
March 2022	Crystallization and crystallinity, Class Test
April 2022	Properties of Polymer, Previous year question solve, Practice



# Lesson Plan (2021-22)

#### **PG SEMESTER-I**

# PAPER: CEM 102 (ORGANIC CHEMISTRY):

PERIOD	TOPIC(S) TO BE COVERED
October 2021	Unit-4: Natural Products - Alkaloids
November 2021	Unit-4: Natural Products - Alkaloids
December 2021	Unit-5: Retrosynthetic analysis-I

### PG SEMESTER-II

### PAPER: CEM 204 (Nanotechnology: Principles and Practices)

PERIOD	TOPIC(S) TO BE COVERED
February 2022	Unit-1 & 2: Introduction, Synthesis of Nanomaterials
March 2022	Unit-3: Analysis techniques
April 2022	Unit-4: Application of Nanotechnology

#### PG SEMESTER-III

# PAPER: CEM 303 (ORGANIC CHEMISTRY SPECIALIZATION):

PERIOD	TOPIC(S) TO BE COVERED	
September 2021	Unit 01: Bioorganic and Supramolecular Chemistry-I	
October 2021	Unit 03: Bioorganic and Supramolecular Chemistry-III	
November 2021	Unit 03: Bioorganic and Supramolecular Chemistry-III	
PAPER: CEM 304 (ORGANIC CHEMISTRY SPECIALIZATION):		
PERIOD	TOPIC(S) TO BE COVERED	
September 2021	Unit-05: Antimalarial drugs	
October 2021	Unit-05: Antimalarial drugs	
PAPER: CEM 395 (ORGANIC CHEMISTRY SPECIALIZATION):		
PERIOD	TOPIC(S) TO BE COVERED	
September 2021		
– December 2021	Project work	
(16 weeks)		

### PG SEMESTER-IV

#### PAPER: CEM 403 (ORGANIC CHEMISTRY SPECIALIZATION):

PERIOD	TOPIC(S) TO BE COVERED	
February 2022	Unit- 04: Stereochemistry-VI	
March 2022	Unit- 04: Stereochemistry-VI	
April 2022	Unit- 04: Stereochemistry-VI, Class test	
PAPER: CEM 404 (ORGANIC CHEMISTRY SPECIALIZATION):		
PERIOD	TOPIC(S) TO BE COVERED	
February 2022	Unit-03: Science and technology of Cereal Processing	
March 2022	Unit-03: Science and technology of Cereal Processing	
PAPER: CEM 495 (ORGANIC CHEMISTRY SPECIALIZATION):		
PERIOD	TOPIC(S) TO BE COVERED	
February 2022 –		
May 2022	Project work	
(16 weeks)		