

### Lesson Plan (2020-21)

### **TEACHER: SUSOVAN MANDAL (ORGANIC CHEMISTRY)**

### UG SEMESTER-I

### PAPER: CC-1T (ORGANIC CHEMISTRY-I), Stereochemistry I (25 Lectures)

PERIOD	TOPIC(S) TO BE COVERED
October 2020	Bonding geometries of carbon compounds
November 2020	Concept of chirality and symmetry
December 2020	Relative and absolute configuration, Class test
January 2020	Optical activity of chiral compounds, Previous year question solve, Class test

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

PERIOD	TOPIC(S) TO BE COVERED
November 2020	Separation
December 2020	Determination of boiling point
January 2020	Identification of a Pure Organic Compound

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

PERIOD	TOPIC(S) TO BE COVERED
October 2020	Fundamentals of Organic Chemistry
November 2020	Stereochemistry
December 2020	Aliphatic Hydrocarbons

#### **UG SEMESTER-II**

#### PAPER: CC-4T (ORGANIC CHEMISTRY-II), Stereochemistry II (20 Lectures)

PERIOD	TOPIC(S) TO BE COVERED
February 2021	Chirality arising out of stereoaxis
March 2021	Concept of prostereoisomerism, Class Test
April 2021	Conformation, Class Test
May 2021	Previous year question solve, Practice

#### PAPER: CC-4P (CHEMISTRY LAB)

PERIOD	TOPIC(S) TO BE COVERED
March 2021	Organic Preparations
April 2021	Organic Preparations, Purification
May 2021	Organic Preparations, Purification

#### **UG SEMESTER-III**

#### PAPER: CC-7T (ORGANIC CHEMISTRY-III), Aromatic Substitution and Organometallics (15 Lectures)

PERIOD	TOPIC(S) TO BE COVERED
August 2020	Electrophilic aromatic substitution
September 2020	Nucleophilic aromatic substitution
October 2020	Grignard reagent
November 2020	Previous year question solve, Class test

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

PERIOD	TOPIC(S) TO BE COVERED
September 2020	Aromatic Hydrocarbons, Organometallic Compounds
October 2020	Aryl Halides, Alcohols, Phenols and Ethers
November 2020	Carbonyl Compounds



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

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PERIOD	TOPIC(S) TO BE COVERED
September 2020	Identification of a pure organic compound
October 2020	Identification of a pure organic compound
November 2020	Identification of a pure organic compound

### **UG SEMESTER-IV**

### PAPER: CC-10T (ORGANIC CHEMISTRY-IV), The Logic of Organic Synthesis

PERIOD	TOPIC(S) TO BE COVERED
February 2021	Retrosynthetic analysis
March 2021	Retrosynthetic analysis
April 2021	Retrosynthetic analysis , Strategy of ring synthesis
May 2021	Asymmetric synthesis, Previous year question solve, Class tests

### **UG SEMESTER-V**

### PAPER: CC-12T (ORGANIC CHEMISTRY-V): Cyclic Stereochemistry and Bio-molecules

PERIOD	TOPIC(S) TO BE COVERED
July 2020	Cyclic Stereochemistry
August 2020	Cyclic Stereochemistry, Amino acids
September 2020	Nucleic acids, Peptides
October 2020	Previous year question solve, Class tests

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

### PAPER: CEM 102 (ORGANIC CHEMISTRY):

PERIOD	TOPIC(S) TO BE COVERED
October 2020	Unit-5: Retrosynthetic analysis-I
November 2020	Unit-5: Retrosynthetic analysis-I
December 2020	Unit-5: Retrosynthetic analysis-I

#### PG SEMESTER-II

### PAPER: CEM 201 (ORGANIC CHEMISTRY):

PERIOD	TOPIC(S) TO BE COVERED
February 2021	Unit-3: Retro synthetic analysis-II
March 2021	Unit-3: Retro synthetic analysis-II
April 2021	Unit-3: Retro synthetic analysis-II

### PG SEMESTER-III

#### PAPER: CEM 302 (ORGANIC CHEMISTRY SPECIALIZATION):

PERIOD	TOPIC(S) TO BE COVERED	
September 2020	Unit 02: Linear Free Energy Relationship-I	
October 2020	Unit 02: Linear Free Energy Relationship-I	
November 2020	Unit-03: Linear Free Energy Relationship-II	
PAPER: CEM 303 (ORGANIC CHEMISTRY SPECIALIZATION):		
PERIOD	TOPIC(S) TO BE COVERED	
September 2020	Unit-02: Bioorganic and Supramolecular Chemistry-II	
October 2020	Unit-04: Peptides and Nucleic acids	



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

PERIOD	TOPIC(S) TO BE COVERED
September 2020	
– December 2020	Project work
(16 weeks)	

### PG SEMESTER-IV

### PAPER: CEM 402 (ORGANIC CHEMISTRY SPECIALIZATION):

PERIOD	TOPIC(S) TO BE COVERED	
February 2021	Unit-03: Biological Active Molecules	
March 2021	Unit-04: Vitamins and co-enzymes	
April 2021	Unit-04: Vitamins and co-enzymes	
PAPER: CEM 403 (ORGANIC CHEMISTRY SPECIALIZATION):		
PERIOD	TOPIC(S) TO BE COVERED	
February 2021	Unit-01: Stereochemistry-III	
March 2021	Unit- 05: Stereochemistry-VII	
PAPER: CEM 495 (ORGANIC CHEMISTRY SPECIALIZATION):		
PERIOD	TOPIC(S) TO BE COVERED	
February 2021 –		
May 2021	Project work	
(16 weeks)		