

**Department of Chemistry**

**Academic Calendar and Academic Plan for AY 2024-25 (ODD SEMESTER)**

**Semester -I (Major)**

**Full Marks: 100 [Theory-50 (CA-15 & ESE-35) & Practical-50 (CA-30 & ESE-20)]**

Name of the Paper	Unit Number	Topic	Name of the Teacher	To be completed during the month and year	No of Practical Classes	No of Theoretical Classes	Continuous Internal Assessment in the Month of	
General Chemistry - I (BSCCEMMJ101)	Unit I	Atomic structure	Sourav Mardanya	September, 2024	NA	6	CIA-I Last week of September	
	Unit II	Periodic table	Deeppriya Roy Sarkar	September, 2024	NA	6		
	Unit III	Chemical bonding	Sourav Mardanya & Deeppriya Roy Sarkar	November, 2024	NA	3+6		
	Unit IV	Basics of organic chemistry						CIA-II Last week of November
		a. Organic compounds	Mousumi Kundu	August. 2024	NA	2		
		b. Electronic displacements	Mousumi Kundu	September, 2024	NA	2		
		c. Reactive intermediates	Sourav Mardanya	November, 2024	NA	3		
		d. Introduction to organic reactions	Mousumi Kundu	November, 2024	NA	4		
		e. Stereochemistry	Mousumi Kundu	November, 2024	NA	5		
Practical	Organic Chemistry Practical	Mousumi Kundu	November, 2024	20	NA			

- NA – Not Applicable

**Department of Chemistry**

**Academic Calendar and Academic Plan for AY 2024-25 (ODD SEMESTER)**

**Semester -I (Minor)**

**Full Marks: 100 [Theory-50 (CA-15 & ESE-35) & Practical-50 (CA-30 & ESE-20)]**

Name of the Paper	Unit Number	Topic	Name of the Teacher	To be completed during the month and year	No of Practical Classes	No of Theoretical Classes	Continuous Internal Assessment in the Month of	
General Chemistry - I (BSCCEMMN101)	Unit I	Atomic structure	Samyabrati Sarkar	September, 2024	NA	6	CIA-I Last week of September	
	Unit II	Periodic table	Deeppriya Roy Sarkar	September, 2024	NA	6		
	Unit III	Chemical bonding	Samyabrati Sarkar & Deeppriya Roy Sarkar	November, 2024	NA	3+6		
	Unit IV	Basics of organic chemistry						CIA-II Last week of November
		a. Organic compounds	Mousumi Kundu	August. 2024	NA	2		
		b. Electronic displacements	Mousumi Kundu	September, 2024	NA	2		
		c. Reactive intermediates	Samyabrati Sarkar	November, 2024	NA	3		
		d. Introduction to organic reactions	Mousumi Kundu	November, 2024	NA	4		
		e. Stereochemistry	Mousumi Kundu	November, 2024	NA	5		
Practical	Organic Chemistry Practical	Mousumi Kundu	November, 2024	20	NA			

- NA – Not Applicable

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Academic Calendar and Academic Plan for AY 2024-25 (ODD SEMESTER)

Semester -I: Skill Enhancement Course (SEC)

Full Marks: 50 [Theory (CA – 15 & ESE – 35)]

Name of the Paper	Unit Number	Topic	Name of the Teacher	To be completed during the month and year	No of Practical Classes	No of Theoretical Classes	Continuous Internal Assessment in the Month of
Industrial Chemistry (BSCCEMSE101)	Unit I	Paints	Sourav Mardanya & Deeppriya Roy Sarkar	November, 2024	NA	6+6	CIA-I Last week of September  CIA-II Last week of November
	Unit II	Electrochemical and electro-thermal industries	Samyabrati Sarkar	November, 2024	NA	6	
	Unit III	Ceramics	Samyabrati Sarkar	September, 2024	NA	6	
	Unit IV	Rusting of iron and steel	Sourav Mardanya	September, 2024	NA	6	
	Unit V	Industrial safety and fire protection	Deeppriya Roy Sarkar	September, 2024	NA	6	

- NA – Not Applicable

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Academic Calendar and Academic Plan for AY 2024-25 (ODD SEMESTER)

Semester -I Multi-Disciplinary (MD)

Full Marks: 50 (Theoretical ESE – 35 & Theoretical CA – 15)

Name of the Paper	Unit Number	Topic	Name of the Teacher	To be completed during the month and year	No of Practical Classes	No of Theoretical Classes	Continuous Internal Assessment in the Month of
Physical Science (BSCCEMMD101)	Unit I	Thermodynamics laws	Samyabrati Sarkar	September, 2024	NA	10	CIA-I Last week of September  CIA-II Last week of November
	Unit II	States of matter					
		a. Gaseous state	Sourav Mardanya	September, 2024	NA	6	
		b. Liquid state	Sourav Mardanya	November, 2024	NA	3	
		c. Solid state	Sourav Mardanya	November, 2024	NA	3	
	Unit III	Chemical kinetics	Samyabrati Sarkar	November, 2024	NA	8	

- NA – Not Applicable

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Academic Calendar and Academic Plan for AY 2024-25 (ODD SEMESTER)

Semester -III (Major)

Full Marks: 100 [Theory-50 (CA-15 & ESE-35) & Practical-50 (CA-30 & ESE-20)]

Name of the Paper	Unit Number	Topic	Name of the Teacher	To be completed during the month and year	No of Practical Classes	No of Theoretical Classes	Continuous Internal Assessment in the Month of
Inorganic Chemistry-I(BSCCEMMJ301)	Unit I	Coordination chemistry	Sourav Mardanya & Mousumi Kundu & Deeppriya Roy Sarkar	November, 2024	NA	6+6+6	CIA-I Last week of November
	Unit II	Chemistry of s and p block elements	Deeppriya Roy Sarkar & Mousumi Kundu	December-January, 2024	NA	6+3	CIA-II Last week of January
	Unit III	Chemistry of d block elements	Sourav Mardanya & Mousumi Kundu	December-January, 2024	NA	6+3	
	Practical	Inorganic chemistry practical	Sourav Mardanya	December-January, 2024	22	NA	

- NA – Not Applicable

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Academic Calendar and Academic Plan for AY 2024-25 (ODD SEMESTER)

Semester -III (Major)

Full Marks: 100 [Theory-50 (CA-15 & ESE-35) & Practical-50 (CA-30 & ESE-20)]

Name of the Paper	Unit Number	Topic	Name of the Teacher	To be completed during the month and year	No of Practical Classes	No of Theoretical Classes	Continuous Internal Assessment in the Month of
Physical Chemistry-I (BSCCEMMJ302)	Unit I	Mathematics in physical chemistry	Samyabrati Sarkar	October, 2024	NA	6	CIA-I Last week of November
	Unit II	Thermodynamics-I	Samyabrati Sarkar	November, 2024	NA	9	
	Unit III	Properties of solids	Samyabrati Sarkar	December, 2024	NA	9	
	Unit IV	Electrochemistry	Samyabrati Sarkar	January, 2024	NA	12	CIA-II Last week week of January
	Practical	Physical chemistry practical	Samyabrati Sarkar	December, 2024	18	NA	

- NA – Not Applicable

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Academic Calendar and Academic Plan for AY 2024-25 (ODD SEMESTER)

Semester -III (Minor)

Full Marks: 100 [Theory-50 (CA-15 & ESE-35) & Practical-50 (CA-30 & ESE-20)]

Name of the Paper	Unit Number	Topic	Name of the Teacher	To be completed during the month and year	No of Practical Classes	No of Theoretical Classes	Continuous Internal Assessment in the Month of
Inorganic and organic chemistry (BSCCEMMN301)	Unit I	Nuclear chemistry	Deeppriya Roy Sarkar	November, 2024	NA	6	CIA-I Last week of November
	Unit II	Coordination chemistry	Deeppriya Roy Sarkar	January, 2024	NA	6	
	Unit III	Stereochemistry II	Mousumi Kundu	November, 2024	NA	6	
	Unit IV	Carbohydrate chemistry	Mousumi Kundu	January, 2024	NA	6	CIA-II Last week of January
	Practical	Inorganic chemistry practical	Deeppriya Roy Sarkar	December, 2024	20	NA	

- NA – Not Applicable

**Department of Chemistry**

**Academic Calendar and Academic Plan for AY 2024-25 (ODD SEMESTER)**

**Semester -V (CORE)**

**Full Marks: 100 [Theory-50 (CA-15 & ESE-35) & Practical-50 (CA-30 & ESE-20)]**

Name of the Paper	Unit Number	Topic	Name of the Teacher	To be completed during the month and year	No of Practical Classes	No of Theoretical Classes	Continuous Internal Assessment in the Month of
Organic Chemistry-V(BSCHCEMC501)	Unit I	Biomolecules	Mousumi Kundu, Samyabrati Sarkar & Deeppriya Roy Sarkar	September, 2024	NA	6+6+6	CIA-I Last week of September  CIA-II Last week of November
	Unit II	Bioenergetics	Mousumi Kundu, Sourav Mardanya & Deeppriya Roy Sarkar	September, 2024	NA	6+6+6	
	Unit III	Pharmaceutical compounds	Mousumi Kundu & Deeppriya Roy Sarkar	November, 2024	NA	6+4	
	Unit IV	Synthetic methodology	Mousumi Kundu & Deeppriya Roy Sarkar	November, 2024	NA	6+8	
	Practical	Organic chemistry practical	Mousumi Kundu	November, 2024	22	NA	

- NA – Not Applicable



**Department of Chemistry**

**Academic Calendar and Academic Plan for AY 2024-25 (ODD SEMESTER)**

**Semester –V (CORE)**

**Full Marks: 100 [Theory-50 (CA-15 & ESE-35) & Practical-50 (CA-30 & ESE-20)]**

Name of the Paper	Unit Number	Topic	Name of the Teacher	To be completed during the month and year	No of Practical Classes	No of Theoretical Classes	Continuous Internal Assessment in the Month of
Inorganic Chemistry-IV (BSCHCEMC502)	Unit I	Redox potential and redox equilibria	Sourav Mardanya, Samyabrati Sarkar	September, 2024	NA	12+6	CIA-I Last week of September  CIA-II Last week of November
	Unit II	Nuclear chemistry	Sourav Mardanya, Samyabrati Sarkar & Deeppriya Roy Sarkar	November, 2024	NA	12+6+6	
	Unit III	Organometallic compounds	Sourav Mardanya, Samyabrati Sarkar & Deeppriya Roy Sarkar	November, 2024	NA	6+12+6	
	Practical	Inorganic chemistry practical	Sourav Mardanya & Deeppriya Roy Sarkar	November, 2024	22	NA	

- NA – Not Applicable

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Academic Calendar and Academic Plan for AY 2024-25 (ODD SEMESTER)

Semester -V DISCIPLINE SPECIFIC ELECTIVE (DSE)

Full Marks: 50 (Theoretical ESE – 35 & Theoretical CA – 15)

Name of the Paper	Unit Number	Topic	Name of the Teacher	To be completed during the month and year	No of Practical Classes	No of Theoretical Classes	Continuous Internal Assessment in the Month of
Environmental chemistry (BSCHCEMDSE502)	Unit I	The atmosphere	Deeppriya Roy Sarkar	September, 2024	NA	6	CIA-I Last week of September
	Unit II	Aspects of environmental inorganic chemistry	Sourav Mardanya	September, 2024	NA	6	
	Unit III	The hydrosphere	Deeppriya Roy Sarkar	November, 2024	NA	6	CIA-II Last week of November
	Unit IV	The lithosphere and pollution control	Sourav Mardanya	November, 2024	NA	6	

- NA – Not Applicable

Department of Chemistry

Academic Calendar and Academic Plan for AY 2024-25 (ODD SEMESTER)

Semester -V DISCIPLINE SPECIFIC ELECTIVE (DSE)

Full Marks: 50 (Theoretical ESE – 35 & Theoretical CA – 15)

Name of the Paper	Unit Number	Topic	Name of Teacher	To be completed during the month and year	No of Practical Classes	No of Theoretical Classes	Continuous Internal Assessment in the Month of
Solid state chemistry (BSCHCEMDSE503)	Unit I	Basic concepts and selected structures	Mousumi Kundu	September, 2024	NA	12	CIA-I Last week of September  CIA-II Last week of November
	Unit II	Crystallographic Basics	Samyabrati Sarkar	September, 2024	NA	6	
	Unit III	Chemical Bonding in Solids	Samyabrati Sarkar & Mousumi Kundu	November, 2024	NA	6+6	
	Unit IV	Properties of solids	Mousumi Kundu	November, 2024	NA	6	

- NA – Not Applicable