

# DEPARTMENT OF CHEMISTRY (UG & PG), JHARGRAM RAJ COLLEGE LESSON PLAN (SESSION: 2023-2024) TEACHER: SANCHAYITA ADIKARI (<u>INORGANIC CHEMISTRY</u>)

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

PAPER: C3T & C3P	
PERIOD	TOPIC(S) TO BE COVERED
March 2023	Redox Reactions and precipitation reactions (Theory), Oxidation-Reduction Titrimetric (Lab)
April 2023	Extra nuclear Structure of atom (Theory), Acid and Base Titrations (Lab)
May 2023	Practice sessions
PAPER: GE2T & GE2 P	
PERIOD	TOPIC(S) TO BE COVERED
Oct 2023 -Nov	Comparative study of p-block elements (Theory) & Qualitative semimicro
2023	analysis of mixtures containing three radicals (Lab)
January 2023	Practice Sessions

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

# PAPER: C6T & C6P

PERIOD	TOPIC(S) TO BE COVERED
Aug2023-Sep	Chemical Bonding (I) (Theory), Radioactivity (Theory) & Estimation of metal
2023	content in some selective samples (Lab)

#### **UG SEMESTER-IV**

# PAPER: C9T & C9P

PERIOD	TOPIC(S) TO BE COVERED
February 2023	Noble Gases (Theory) & Inorganic preparations (Lab)
Mar 2023 -April	Inorganic Polymers (Theory) & Complexometric titration (Lab)
2023	
May 2023	Practice Sessions

### PAPER: GE4T & GE4P

PERIOD	TOPIC(S) TO BE COVERED
Feb2023-March	Environmental Chemistry (Theory) & Analytic and Environmental Chemistry
2023	(Lab)
April 2023	Practice Sessions

### **UG SEMESTER-V**

## PAPER: C11T & C11P

PERIOD	TOPIC(S) TO BE COVERED
Jul 2023-Sep 2023	Chemistry of d- and f- block elements (Theory) & Gravimetry (Lab)
October 2023	Practice session & Class tests

## PAPER: DSE2T & DSE2P

PERIOD	TOPIC(S) TO BE COVERED
Jul 2023-Aug 2023	Thermal methods of analysis (Theory) & Analysis of soil (Lab)
Sep 2023	Practice Sessions



## DEPARTMENT OF CHEMISTRY (UG & PG), JHARGRAM RAJ COLLEGE LESSON PLAN (SESSION: 2023-2024) UG SEMESTER-VI

## PAPER: C13T & C13P

PERIOD	TOPIC(S) TO BE COVERED
January 2024	Organometallic Chemistry(Theory)
February 2024	Catalysis by Organometallic Compounds (Theory)
Jan 2024 -March	Qualitative semimicro analysis of mixtures (Lab)
2024	

# UG SEMESTER-II (NEP)

## PAPER: MJ2T & MJ2P

PERIOD	TOPIC(S) TO BE COVERED
September 2024	Extra nuclear Structure of atom (Theory)
October 2024	Redox and precipitation reactions (Theory)
September 2024 -	Oxidation-Reduction Titrations (Lab)
October 2024	

## PG SEMESTER-I

#### PAPER: CEM 103 & CEM 195

PERIOD	TOPIC(S) TO BE COVERED
October 2023	Symmetry and Group theory-I (Theory)
Oct 2023 -Nov	Analysis of Metals and Alloys (Lab) & Synthesis and Characterization of inorganic
2023	compounds (Lab)

#### **PG SEMESTER-II**

## PAPER: CEM 203:

PERIOD	TOPIC(S) TO BE COVERED
February 2024	Group theory-II
March 2024	Chemistry of p and d-block elements

#### PG SEMESTER-III

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

PERIOD	TOPIC(S) TO BE COVERED
Sep-Oct 2023	Organometallic chemistry – II and catalysis

## PAPER: CEM 303 (INORGANIC CHEMISTRY SPECIALIZATION):

PERIOD	TOPIC(S) TO BE COVERED
September 2023	Bioinorganic chemistry – II

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

PERIOD	TOPIC(S) TO BE COVERED
September 2023 – December 2023	Project work

# PG SEMESTER-IV

# PAPER: CEM 402 (INORGANIC CHEMISTRY SPECIALIZATION):

PERIOD		)	TOPIC(S) TO BE COVERED
Feb	2024	-Mar	Metal carbonyls and clusters
2024	Ļ		



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

PERIOD		TOPIC(S) TO BE COVERED
	Feb 2024 -March	Inorganic reaction mechanism
	2024	

### PAPER: CEM 495 (INORGANIC CHEMISTRY SPECIALIZATION):

PERIOD	TOPIC(S) TO BE COVERED
Feb 2024 – May	
2024	Project Work