GOVERNMENT POLYTECHNIC JAGATSINGHPUR

CHEMICAL ENGINEERING DEPARTMENT
LESSON PLAN

Discipline :- **CHEMICAL**	Semester:-**4th**	Name of the Teaching Faculty **Dr. SUSHANTA KUMAR BEHERA**
Subject:- **Organic Chemistry**	No of Days/per Week Class **Allotted :-04**	Semester From:- **January** To:- **May**
Course Code: **TH 1**		
Week	**Class Day**	**Theory/ Practical Topics**
1st	1st	**CHAPTER-1: IUPAC NOMENCLATURE** Introduction to organic chemistry
	2nd	Scope of organic chemistry
	3rd	Differentiate between organic compound and inorganic compounds
	4th	Importance of organic Chemistry in modern life.
2nd	1st	Classification of organic compounds
	2nd	Sources of organic compounds
	3rd	Functional groups
	4th	IUPAC rules
3rd	1st	IUPAC naming of mono functional Organic Compound
	2nd	IUPAC naming of poly functional Organic Compound.
	3rd	IUPAC naming practices of different structure names
	4th	Concepts of Isomerism and types with example of isomerism
4th	1st	**CHAPTER-2: ALIPHATIC COMPOUNDS** Introduction to Alkane
	2nd	Methods of preparations of methane
	3rd	Properties and uses of ethane
	4th	Methods of preparations ethane
5th	1st	Application of methane and ethane
	2nd	Concepts of Alkene
	3rd	Properties of ethylene.
	4th	Methods of preparations of ethylene
6th	1st	Concepts of Alkyne
	2nd	Properties and uses of acetylene.
	3rd	Methods of preparation of acetylene.
	4th	Concepts of Alcohol and types
7th	1st	Absolute alcohol and denatured alcohol
	2nd	Properties and uses of methanol.
	3rd	Methods of preparation of methanol.
	4th	Properties and uses of ethanol.
8th	1st	Methods of preparation of ethanol.
	2nd	Introduction to acids
	3rd	Properties and uses of formic acid.

	4th	Methods of preparation of formic acid.
9th	1st	Properties and uses of acetic acid.
	2nd	Methods of preparation of acetic acid.
	3rd	Introduction to aldehyde
	4th	Properties and uses of formaldehyde.
10th	1st	Methods of preparation of formaldehyde.
	2nd	Properties and uses of acetone.
	3rd	Methods of preparation of acetone
	4th	**CHAPTER-3: AROMATIC COMPOUNDS** Introduction to aromatics
11th	1st	Properties and uses of benzene
	2nd	Methods of preparation benzene
	3rd	Methods of preparation, properties and uses of toluene
	4th	Properties and uses of Benzene derivative compound phenol
12th	1st	Methods of preparation of Benzene derivative compound phenol
	2nd	Properties and uses of Benzene derivative compound Benzaldehyde
	3rd	Methods of preparation of Benzene derivative compound
	4th	**CHAPTER-4: CARBOHYDRATES, PROTEINS & FATS** Carbohydrates and its Classification
13th	1st	Synthesis and inter conversions of monosaccharide
	2nd	Properties and uses of glucose, fructose
	3rd	Manufacturing of glucose, fructose
	4th	Properties and uses of sucrose, and starch
14th	1st	Manufacturing of sucrose
	2nd	Preparation of amino acid
	3rd	Properties and uses of amino acid
	4th	Classification of proteins, Peptides
15th	1st	Properties of proteins
	2nd	Uses of proteins
	3rd	Sources, of fats
	4th	Properties and uses of fats