

GOVERNMENT POLYTECHNIC JAIPUR
DEPARTMENT OF MATHS AND SCIENCE
LESSON PLAN

Discipline: Math and science	Semester: 1st/2nd	Name of the Teaching faculty: Hitesh Mallick, Sasmita Tiadi
Subject: Chemistry practical	No of Days/Week class allotted: 4	Semester from Date: 25.10.2022 To Date: 31.01.2023 No of weeks: 15
Week	Class Day	Topics
1st	1st	Learning about apparatus used in chemistry lab and their safety
	2nd	EXPT 1: Preparation of carbon dioxide gas and study of its properties
	3rd	Discussion
	4th	Record and viva
2nd	1st	Expt 2: crystallisation of copper sulphate from copper carbonate
	2nd	Demonstration
	3rd	Submission of dry $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ crystals by the students
	4th	Record and viva
3rd	1st	Expt 3: Acid Base Titration
	2nd	Theory
	3rd	Demonstration
	4th	Discussion
4th	1st	Titration of strong acid with weak base
	2nd	Experiment
	3rd	Tabulation and Calculation
	4th	Record and viva
5th	1st	Titration of weak acid with strong base
	2nd	Experiment
	3rd	Tabulation and Calculation
	4th	Record and viva
6th	1st	Assignment
	2nd	Question discussion
	3rd	Record and viva
	4th	Record and viva
7th	1st	Expt 4 : Salt analysis
	2nd	Theory
	3rd	Discussion
	4th	Types of salt
8th	1st	Determination of known basic radicals
	2nd	Theory and demonstration
	3rd	Demonstration of known acid radicals
	4th	Theory and demonstration
9th	1st	Experiment by students (known basic radicals)
	2nd	Do
	3rd	Do
	4th	Do
10th	1st	Experiment by students (known acid radicals)
	2nd	Do
	3rd	Do

	4th	Do
11th	1st	Determination of unknown basic radicals
	2nd	Experiment by the students
	3rd	Do
	4th	Do
12th	1st	Determination of unknown acid radicals
	2nd	Experiment by the students
	3rd	Do
	4th	Do
13th	1st	Identification of unknown Salt
	2nd	Experiment by the students
	3rd	Do
	4th	Do
14th	1st	Preparation and study of physical and chemical properties of NH_3 gas.
	2nd	Do
	3rd	Do
	4th	Do
15th	1st	Record and viva
	2nd	Record and viva
	3rd	Revision
	4th	Revision
		Extra one week will be required to complete the syllabus.
		Books Recommended 1. Engineering Chemistry practical by Y.R. Sharma and P. Mitra, Kalyani Publishers 2. Modern abc
		Signature of Faculty

Hitesh Malher
Sasmita Tiadi