

KIITPOLYTECHNIC,BHUBANESWAR

LESSONPLAN

Session(2023-2024)

Discipline: Mechanical/Metallurgy/ Civil	Semester: 2nd Summer/2024	Name of the faculty: Dr.Ranjita.P.Biswal Email Id:ranjita@kp.kiit.ac.in
Subject: Engineering Chemistry Practical (Pr-2b)	No. of Days/week:02(2 periods /Day) Experiments will be performed in small groups Of 5to6students	Start Date: 29/01/2024 EndDate:14/05/2024

Week	ClassDay	PracticalTopics
1 st	1st	- Rules,regulation,Distribution of marks, Lab needs such as manual,roughrecord,apron. - Fundamentals,brief idea about experiments,AnalysisofAcidradicals(CO_3^{2-}, S^{2-}, Cl^-, NO_3^-, SO_4^{2-})
	2nd	- Rules,regulation,Distributionofmarks,Labneedssuchasmanual,rough record,apron - Fundamentals,brief idea about experiments,AnalysisofAcidradicals(CO_3^{2-}, S^{2-}, Cl^-, NO_3^-, SO_4^{2-})
2nd	1st	Demonstration of Analysis of Acid radicals(CO_3^{2-}, S^{2-}, Cl^-, NO_3^-, SO_4^{2-})
	2nd	Demonstration of Analysis of Acid radicals(CO_3^{2-}, S^{2-}, Cl^-, NO_3^-, SO_4^{2-})
3rd	1st	Analysis of Acidradicals(CO_3^{2-}, S^{2-}, Cl^-, NO_3^-, SO_4^{2-})done by the student
	2nd	Repeat Class/ Defaulter

4th	1st	Detection of acid radical, demonstration
	2nd	Detection of acid radical, demonstration
5th	1st	Analysis of the basic radical through drytest(Cu^{2+}, Al^{3+}, Zn^{2+}, Ca^{2+}, NH_4^+, Mg^{2+}, Na^+, K^+)
	2nd	Analysis of the basic radical through drytest(Cu^{2+}, Al^{3+}, Zn^{2+}, Ca^{2+}, NH_4^+, Mg^{2+}, Na^+, K^+)
6th	1st	Analysis of the basic radicals through wet test
	2nd	Analysis of the basic radicals through wet test
7th	1st	Repeat Class
	2nd	Identification of salt, Demonstration and done by the student
8th	1st	Identification of salt, Demonstration and done by the student
	2nd	Acid-Base titration, Demonstration, done by the students
9th	1st	Acid-Base titration, Demonstration, done by the students
	2nd	CO_2 gas preparation & properties, Demonstration and done by the student
10th	1st	CO_2 gas preparation & properties, Demonstration and done by the student
11th	2nd	NH_3 gas preparation & properties, Demonstration and done by the student - Crystallization of copper sulfate from copper carbonate
12th	1st	NH_3 gas preparation & properties, Demonstration and done by the student - Crystallization of copper sulfate from copper carbonate
	2nd	Repeat Class for experiment 1, 2 & 3
13th	1st	Repeat Class for experiment 4, 5 & 6
	2nd	Repeat Class for experiment 7, 8 & 9
14th	1st	Practice Test
	2nd	Practice Test