## UTKAL GOURAV MADHUSUDAN INSTITUTE OF TECHNOLOGY, RAYAGADA Academic Lesson Plan for 2nd Semester - 2024 (Summer)

Name of the teaching faculty: Smt. Lopamudra Satpathy,

Guest Faculty, Lecturer (Chemistry)

Dept.: Department of Mathematics & Science

Semester: 2nd

Subject : Practical 2B : Engg. Chemistry Laboratory

No of Periods per week: 4, Total Periods: 60, End semester Exam.: 50 Marks, Sessional: 50 Marks,

Total Marks: 100 Marks

Week	Period	Experiment	PRACTICAL
1st	1 <sup>st</sup>		Introduction to chemistry lab, about safety measures, about maintenance of practical records.
	2nd		Introduction to the students about use of different lab equipments and how to handle them safely.
	3rd	Exp.1	Dictation of the procedure of exp. 1, preparation and study of properties of $CO_2$ gas, explanation of theory with equations.
	4 <sup>th</sup>	Exp.1	Dictation of the procedure of exp. 1, preparation and study of properties of $CO_2$ gas, explanation of theory with equations.
	1 <sup>st</sup>	Exp.1	Preparation Of CO <sub>2</sub> gas
2nd	2 <sup>nd</sup>	Exp.1	Expt. Conducted by the Students
	3rd	Exp.1	Expt. Conducted by the Students
	4th	Exp.1	Checking of rough practical record
3rd	1st	Exp. 1	Checking of practical records and discussion of viva questions of expt. 1
	2 <sup>nd</sup>	Exp.1	Checking of practical records and discussion of viva questions of expt. 1
	3 <sup>rd</sup>	Exp.2	Dictation of the procedure of exp. 2 Preparation and study of properties of ammonia gas. Explanation Of Theory With Equations.
	4th	Exp.2	Dictation of the procedure of exp.2 Preparation and study of properties of ammonia gas. Explanation Of Theory With Equations

4th	1 <sup>st</sup>	Exp.2	Demonstrate of the exp.2 (Preparation of ammonia gas )
	2nd	Exp.2	Expt. Conducted by the Students
	3rd	Exp.2	Expt. Conducted by the Students.
	4th	Exp.2	Checking of rough practical record
	1 <sup>st</sup>	Exp.2	Checking of practical records and discussion of viva questions of expt. 2.
5th	2 <sup>nd</sup>	Exp.2	Checking of practical records and discussion of viva questions of expt. 2.
	3rd	Exp.3	Dictation of the procedure of exp. 3. Crystallization of CuSO <sub>4</sub> . Explanation Of Theory With Equations.
	4 <sup>th</sup>	Exp.3	Dictation of the procedure of exp. 3. Crystallization of CuSO <sub>4</sub> . Explanation Of Theory With Equations
	1 <sup>st</sup>	Exp.3	Demonstrate of the exp.3(Crystallization )
6th	2 <sup>nd</sup>	Exp.3	Expt. Conducted by the Students
	3rd	Exp.3	Expt. Conducted by the Students
	4 <sup>th</sup>	Exp.3	Checking of rough practical record
7th	1st	Exp.3	Checking of practical records and discussion of viva questions of expt.3.
	2 <sup>nd</sup>	Exp.3	Checking of practical records and discussion of viva questions of expt.3.
	3rd	Exp.4(i) & (ii)	Dictation of the procedure of exp.4 (i ) and (ii) Acid Base Titration. Explanation Of Theory With Equations.
			Dictation of the procedure of exp.4 (i) and (ii)
	4 <sup>th</sup>	Exp.4(i) & (ii)	Acid Base Titration. Explanation Of Theory
			With Equations
8th	1st	Exp.4(i)	Demonstrate of the exp.4(i) (Titration)

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	2nd	Exp.4(i)	Demonstrate of the exp. exp.4 (i) (Titration)
	3rd	Exp.4(i)	Expt. Conducted by the Students Alkalimetry
	4 <sup>th</sup>	Exp.4(i)	Expt. Conducted by the Students Alkalimetry
	1st	Exp.4 (ii)	Expt. Conducted by the Students Acidimetry
9th	2 <sup>nd</sup>	Exp.4 (ii)	Expt. Conducted by the Students Acidimetry
	3rd	Exp.4(i) & (ii)	Checking of rough practical record
	4 <sup>th</sup>	Exp.4(i) & (ii)	Checking of rough practical record
	1 <sup>st</sup>	Exp.4(i) & (ii)	Checking of practical records and discussion of viva questions of Exp.4(i) & (ii)
_	2 <sup>nd</sup>	Exp.4(i) & (ii)	Checking of practical records and discussion of viva questions of Exp.4(i) & (ii)
10th	3rd	Exp.5	Dictation of the procedure of exp. 5. Test of acid radicals
	4 <sup>th</sup>	Exp.5	Dictation of the procedure of exp. 5. Test of acid radicals
	1st	Exp.5	Demonstrate of the exp.5(Acid radicals )
11+h	2 <sup>nd</sup>	Exp.5	Expt. Conducted by the Students
11th	3rd	Exp.5	Expt. Conducted by the Students
	4th	Exp.5	Checking of rough practical record
	1 <sup>st</sup>	Exp.5	Checking of practical records and discussion of viva questions of expt.5.
12th	2 <sup>nd</sup>	Exp.5	Checking of practical records and discussion of viva questions of expt.5.
	3rd	Exp.6	Dictation of the procedure of exp.6. Test of basic radicals
	4 <sup>th</sup>	Exp.6	Dictation of the procedure of exp.6. Test of basic radicals
13th	1 <sup>st</sup>	Exp.6	Demonstrate of the exp.6(Basic radicals )
	2 <sup>nd</sup>	Exp.6	Expt. Conducted by the Students
	3rd	Exp.6	Expt. Conducted by the Students

	4 <sup>th</sup>	Exp.6	Checking of rough practical record
14th	1st	Exp.6	Checking of practical records and discussion of viva questions of expt.6.
	2 <sup>nd</sup>	Exp.6	Checking of practical records and discussion of viva questions of expt.6.
	3rd	Exp.7	Test of unknown salt( expt.7 )
	4 <sup>th</sup>	Exp.7	Expt. Conducted by the Students
15th	1 <sup>st</sup>	Exp.7	Expt. Conducted by the Students
	2 <sup>nd</sup>	Exp.7	Checking of rough practical record
	3rd	Exp.7	Checking of practical records and discussion of viva questions of expt.7.
	4 <sup>th</sup>	Exp.7	Checking of practical records and discussion of viva questions of expt.7.

Smt. Lopamudra Satpathy, (GF) Lecturer in Chemistry, Dept. of Mathematics & Science, UGMIT, Rayagada