## UTKAL GOURAV MADHUSUDAN INSTITUTE OF TECHNOLOGY, RAYAGADA Academic Lesson Plan for 1st Semester – 2023 (Winter)

Name of the teaching faculty:Smt.Lopamudra Satapathy,

PTGF Lecturer (Chemistry)

Dept.: Department of Mathematics & Science

Semester: 1st

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.
	2 <sup>nd</sup>		Introduction to the students about use of different lab equipments and how to handle them safely.
	3rd	Exp.1 & 2	Dictation of the procedure of exp. 1 and 2 Acid Base Titration. Explanation Of Theory With Equations.
	4 <sup>th</sup>	Exp.1 & 2	Dictation of the procedure of exp. 1 and 2 Acid Base Titration. Explanation Of Theory With Equations
	1 <sup>st</sup>	Exp.1	Demonstrate of the exp.1 (Titration)
2nd	2 <sup>nd</sup>	Exp. 2	Demonstrate of the exp.2 (Titration)
	3 <sup>rd</sup>	Exp.1	Expt. Conducted by the Students Alkalimetry
	4 <sup>th</sup>	Exp.1	Expt. Conducted by the Students Alkalimetry
3rd	1 <sup>st</sup>	Exp.1	Checking of rough practical record
	2 <sup>nd</sup>	Exp.2	Expt. Conducted by the Students Acidimetry
	3rd	Exp.2	Expt. Conducted by the Students Acidimetry
	4 <sup>th</sup>	Exp.2	Checking of rough practical record
4th	1 <sup>st</sup>	Exp.1	Checking of practical records and discussion of viva questions of expt. 1
	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 Preparation and study of properties of ammonia gas. Explanation Of Theory With Equations.
	4 <sup>th</sup>	Exp.3	Dictation of the procedure of exp. 3 Preparation and study of properties of ammonia gas. Explanation Of Theory With Equations.
	1 <sup>st</sup>	Exp.3	Demonstrate of the exp.3 (Preparation of ammonia gas )
5th	2 <sup>nd</sup>	Exp.3	Checking of rough practical record
	3 <sup>rd</sup>	Exp.3	Expt. Conducted by the Students.
	4 <sup>th</sup>	Exp.3	Expt. Conducted by the Students.
	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.
6th	3 <sup>rd</sup>	Exp.4	Dictation of the procedure of exp. 4, preparation and study of properties of CO <sub>2</sub> gas, explanation of theory with equations.
	4 <sup>th</sup>	Exp.4	Dictation of the procedure of exp. 4, preparation and study of properties of CO <sub>2</sub> gas, explanation of theory with equations.
	1 <sup>st</sup>	Exp.4	Demonstrate of the exp.4 (Preparation Of CO <sub>2</sub> gas )
7th	2 <sup>nd</sup>	Exp.4	Checking of rough practical record
	3 <sup>rd</sup>	Exp.4	Expt. Conducted by the Students
	4 <sup>th</sup>	Exp.4	Expt. Conducted by the Students
8th	1 <sup>st</sup>	Exp.4	Checking of practical records and discussion of viva questions of expt.4.
	2 <sup>nd</sup>	Exp.4	Checking of practical records and discussion of viva questions of expt.4.
	3rd	Exp.5	Dictation of the procedure of exp. 5. Crystallization of CuSO <sub>4</sub> . Explanation Of Theory With Equations.

	4 <sup>th</sup>	Exp.5	Dictation of the procedure of exp. 5. Crystallization of CuSO <sub>4</sub> . Explanation Of Theory With Equations
9th	1 <sup>st</sup>	Exp.5	Demonstrate of the exp.5(Crystallization )
	2 <sup>nd</sup>	Exp.5	Checking of rough practical record
	3rd	Exp.5	Expt. Conducted by the Students
	4 <sup>th</sup>	Exp.5	Expt. Conducted by the Students
	1 <sup>st</sup>	Exp.5	Checking of practical records and discussion of viva questions of expt.5.
10th	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 acid radicals
	4 <sup>th</sup>	Exp.6	Dictation of the procedure of exp. 6. Test of acid radicals
	1 <sup>st</sup>	Exp.6	Demonstrate of the exp.6(Acid radicals)
11th	$2^{\mathrm{nd}}$	Exp.6	Checking of rough practical record
	3 <sup>rd</sup>	Exp.6	Expt. Conducted by the Students
	4 <sup>th</sup>	Exp.6	Expt. Conducted by the Students
		Exp.6	
12th	1 <sup>st</sup>	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.
	3 <sup>rd</sup>	Exp.7	Dictation of the procedure of exp.7. Test of basic radicals
	4 <sup>th</sup>	Exp.7	Dictation of the procedure of exp.7. Test of basic radicals
13th	1 <sup>st</sup>	Exp.7	Demonstrate of the exp.7(Basic radicals)
	2 <sup>nd</sup>	Exp.7	Checking of rough practical record
	3rd	Exp.7	Expt. Conducted by the Students
	4 <sup>th</sup>	Exp.7	Expt. Conducted by the Students

14th	1 <sup>st</sup>	Exp.7	Checking of practical records and discussion of viva questions of expt.7.
	2 <sup>nd</sup>	Exp.7	Checking of practical records and discussion of viva questions of expt.7.
	3 <sup>rd</sup>	Exp.8	Test of unknown salt( expt.8 )
	4 <sup>th</sup>	Exp.8	Checking of rough practical record
15th	1 <sup>st</sup>	Exp.8	Expt. Conducted by the Students
	2 <sup>nd</sup>	Exp.8	Expt. Conducted by the Students
	3rd	Exp.8	Checking of practical records and discussion of viva questions of expt.8.
	4 <sup>th</sup>	Exp.8	Checking of practical records and discussion of viva questions of expt.8.

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