Discipline: Math & Science	Semester : 1st Semester-2020-21	Name of the Teaching Faculty: Sushreeta Behera (LECT)/ Nigamananda Nayak (Lab Instructor)
Subject: Engineering Chemistry Practical	No. of Days/week Class Allotted: 60	Semester from date: 09/11/2020 to date: 31/03/20201 No of weeks: 18
week	**Class Day**	**Practical Topics**
1st	1st	Safety instructions to the students.
	2nd	Precautions to be taken during practical classes.
2nd	1st	Acquaintance of the students with the laboratory apparatus.
	2nd	Acquaintance of the students with the laboratory chemicals.
3rd	1st	Bunsen burner (Different parts and their functions)
	2nd	Luminous and non-luminous flame
4th	1st	Preparation of CO_2 gas and study its properties. (Theory)
	2nd	Preparation of $C0_2$ gas and study its properties. (Practical)
5th	1st	Preparation of NH_3 gas and study its properties. (Theory)
	2nd	Preparation of NH_3 gas and study its properties. (Practical)
6th	1st	Types of solutions. General process of crystallization
	2nd	Crystallization of Copper sulphate from copper carbonate.(Theory)
7th	1st	Crystallization of Copper sulphate from copper carbonate.(Practical)
	2nd	Volumetric Analysis, Acid- Base indicators
8th	1st	Procedure of acid-base titrations (Acidimetry)
	2nd	Acid-base titrations (Acidimetry)- Practical
9th	1st	Procedure of acid-base titrations (Alkalimetry)
	2nd	Acid-base titrations (Alkalimetry)-Practical
10th	1st	Systematic Qualitative analysis (theory)
	2nd	Systematic Qualitative analysis (theory)
11th	1st	Tests for acid radicals (Known): (i) Carbonate, (ii) Sulphide,
	2nd	Tests for acid radicals (Known): (iii) Chloride, (iv) Nitrate and (v) Sulphate.
12th	1st	Tests for basic radicals (Known) (i)Aluminium (ii)Zinc
	2nd	Test for basic radicals (known) (i) Calcium ion (ii) sodium ion (iii) potassium ion
13th	1st	Test for unknown acid radical
	2nd	Test for unknown basic radical
14th	1st	Test for unknown salt (composed of one basic radical and one acid radical)
	2nd	Test for unknown salt (composed of one basic radical and one acid radical)