RAJARAMBAPU COLLEGE OF SUGAR TECHNOLOGY, ISLAMPUR

UNIT PLAN
2021 -2022

Sub: Applied Chemistry Paper No. I Section: Sugar Chemistry Class: B.Sc. I

Name of the Teacher: Miss. N. M. Patil

Sr. No.	Working Week	Unit to be taught	No. of periods	Teaching method, Aids used	Remarks
1	01/10/2021 To 09/10/2021	Admission Work			
2	11/10/2021 To 18/10/2021	• Introduction • Sugar Chemistry – Constitution of sugar ,natural polymers of sugar • Types of sugar monosaccharides- • Glucose & Fructoe	03	Explanation using PPT	
3	25/10/2021 To 30/10/2021	• Forms of sugar & its use. • Health effects of Sugar- Blood glucose level ,Obesity and Diabetics. • Tooth decay, Hyper activity-Measurements	03	Explanation using PPT	
4	01/11/2021 To 06/11/2021	• Introduction and classification of Carbohydrates with suitable examples. • Reactions of Monosaccharides such as, Mutarotation	02	Explanation using PPT	
5	08/11/2021 To 13/11/2021	• Reactions of Monosaccharides such as, Alkaline degradation,Rearrange mets, • Acidic degradation, Polymerisation, Caramelisation.	03	Explanation using PPT	
6	15/11/2021		03	Explanation	

	To 20/11/2021	• Class Test • Disaccharides and Polysaccharides • Structure and properties of Sucrose , maltose.		using PPT	
7	22/11/2021 To 27/11/2021	• Structure and properties of Lactose, Starch and Cellulose.	03	Explanation using PPT	
8	29/11/2021 To 04/12/2021	• Physical and Chemical Properties of Sugar. • Sucrose derivatives.	03	Explanation using PPT	
9	06/12/2021 To 11/12/2021	• Structure of Sucrose Molecule and • decomposition of sucrose.	03	Explanation using PPT	
10	13/12/2021 To 18/12/2021	• Chemical Properties of sucrose. • sucrose molecule, Crystalline sucrose, amorphous sucrose and aqueous sucrose.	02	Explanation using PPT	
11	20/12/2021 To 25/12/2021	• Solutions and some important terms of solution – Solubility, density, surface tension, boiling point, freezing point, rotation of polarized light. • Class Test-2	02	Explanation using PPT	
12	27/12/2021 To 01/01/2022	• Unit Test – I • Paper Checking			
13	03/01/2022 To 08/01/2022	• Physical Properties of reducing sugar (Dextro and Leavo rotatory) • Explanation of Solubility, density and optical rotation.	02	Explanation using PPT	
14	10/01/2022 To	• Chemical properties of	02	Explanation using PPT	

	15/01/2022	reducing sugar with Organic reagents like Acetone, Benzoic acid, carbonate and acetate. • Chemical properties of reducing sugar with Inorganic reagents like sodium phosphate ,Chloride salt, calcium levitate.			
15	17/01/2022 To 22/01/2022	• Decomposition reaction with alkaline solution and acid solution. • Oscillation reaction with iodine. • Revision of Syllabus and • student doubts about syllabus and • solving of previous question papers. •	02	Explanation using PPT	

Date: 1/10/2021

Signature of the Teacher

RAJARAMBAPU COLLEGE OF SUGAR TECHNOLOGY, ISLAMPUR

UNIT PLAN 2021 -2022

Sub: Equipment Design (Clarification House) Paper No. I
Class: B. Sc. II (Sugar Technology) Sem- III

Name of the Teacher: Mr. R.M. Pawar

Sr. No.	Working Week	Unit to be taught	No. of periods	Teaching method, Aids used	Remarks
1	01/10/2021 To 09/10/2021	Admission Work			
2	11/10/2021 To 18/10/2021	• Syllabus Introduction • Metals, their properties and uses in sugar industries.	03	Explanation	
3	25/10/2021 To 30/10/2021	• Different type of metals used in sugar industries • Metal properties related to engineering/mechanical properties of metal.	03	Explanation	
4	01/11/2021 To 06/11/2021	• Juice heaters • Heat transfer coefficient • Heating surface.	03	Explanation using PPT & solving problem	
5	08/11/2021 To 13/11/2021	• Sizing of heater • Tube size and number of tubes	03	Explanation using PPT & solving problem	
6	15/11/2021 To 20/11/2021	• No of passes and juice inlet/outlet sizes • Construction of juice heater.	03	Explanation using PPT & solving problem	
7	22/11/2021 To 27/11/2021	• Juice Sulphitor • Factors used to design continuous juice sulphitor or reaction tank.	03	Explanation using PPT & solving problem	
8	29/11/2021 To 04/12/2021	• Lime proportioning device (lime dosing) • SO_2 gas distribution (SO_2 gas dosing)	03	Explanation using PPT	
9	06/12/2021 To 11/12/2021	• Mechanical stirrer for mixing of reagent • Design of tank with respect of diameter	03	Explanation using PPT	
10	13/12/2021 To 18/12/2021	• Automation for pH control • Construction of continuous juice sulphitor		Explanation using PPT	

11	20/12/2021 To 25/12/2021	• Sulphur Burners/ Furnace • Combustion process of sulphur • Quantity of air required. • Capacity of sulphur burner.	03	Explanation using PPT	
12	27/12/2021 To 01/01/2022	Unit Test			
13	03/01/2022 To 08/01/2022	• Construction of sulphur burner • Juice Clarifier	03	Explanation using PPT	
14	10/01/2022 To 15/01/2022	• Type of clarifier • Functional theory of operation. • Retention Time	03	Explanation using PPT	
15	17/01/2022 To 22/01/2022	• Flash Tank. • Capacity of Clarifier • Construction of clarifier • Revision & students doubts & Solving old question paper	03	Explanation using PPT & solving problem	

Date: 1/10/2021

Signature of the Teacher