

Lecture Plan		
Name of the college: Government College of Arts, Science and Commerce, Sanquelim- Goa		
Name of Faculty: Ms. Varsha K. Sail	Subject: Chemistry	
Paper code: CHC-301 (Inorganic Chemistry-II)	Program: T.Y.B.Sc.	Division: A
Academic year: 2025- 2026	Semester: IV	Total Lectures: 38
Course Objectives:To acquaint students with the chemical constituents of food, their interactions during processing, and evaluation of various characteristics of food. 2. To familiarize students with the classification of foods and nutrients, and their metabolism in the human body. 3. understand adulterants in food and their characteristics. 4. To familiarize with the laws and regulations on food adulteration		
Expected Course Outcome:		
1) To acquaint students with the chemical constituents of food, their interactions during processing, and evaluation of varied characteristics of food. 2. To familiarize students with the classification of foods and nutrients, and their metabolism in the human body. 3. To understand adulterants in food and their characteristics. 4. To familiarize with the laws and regulations on food adulteration		
Student Learning Outcome:		
1) students will learn with the chemical constituents of food, their interactions during processing, and evaluation of varied characteristics of food familiarize with the laws and regulations on food adulteration		

Month	Lecture From	Lecture To	No. of lectures allotted	Topic, Subtopic to be covered	Exercise/ Assignment	ICT Tools	Reference books
June	23/06/25	28/06/25	30			Smart board, PPT,	Bamji MS, Krishnaswamy K, and Brahmam GNV. Textbook of Human Nutrition. 3rd Edition. Oxford and IBH Publishing Co. Pvt. Ltd. New Delhi, 2009. 3. Sunetra Roday, Food Science and Nutrition, 1st edition, Oxford Higher Education, New Delhi, 2008
July	30/07/25	5/7/25		Unit 1: Basic concept on Food, Nutrition and Nutrients Definition of nutrition, nutrients,			
	7/7/25	12/7/25		adequate, optimum and malnutrition, Classification of Food, Classification of Nutrients. and Functions			
	14/7/25	19/7/25		Unit 2: Carbohydrates & Lipids Carbohydrates: Definition, classification,	List diet rich in carbohydrates taken		
	21/7/25	26/7/25		structure and properties,.. sources, daily requirements, functions			
	28/7/25	2/8/25		Effects of too high and too low carbohydrates on health, Lipids : Classification, nomenclature, saturated, unsaturated fatty acids,			
August	4/8/25	9/8/25		food sources, functions of fats. Definition, classification & properties, daily requirements, role and nutritional significances of PUFA, MUFA, SFA and W-3 fatty acid			

	11/8/25	16/8/25		Protein-Definition, Classification, Structure & properties	List diet rich in protein taken		
	18/8/25	23/8/25		. Effect of too high - too low proteins on health			
				Proteins - Sources, daily requirements, functions			
September	1/9/25	6/9/25		: Fats and Oils Introduction, structure, rancidity, reversion			
	8/9/25	13/9/25		, factors leading to rancidity and reversion, prevention of rancidity,	Measure vol of daily water		
	1/9/25	6/9/25		. effect of heat on fats and oils, polymerization, extraction of fats and oils, refining, hydrogenation of oils.			
	15/9/25	20/9/25		Water 08 Types of water, hydrogen bonding in water, water and ice properties,			
	22/9/25	27/9/25		functions of water in food functions, daily requirements, water balance			
	29/9/25	4/10/25		Food Laws & Regulations: Role of FDA, Prevention of Food Adulteration Act 1954, Food Safety and Standards Act (2006), Food Safety and Standards Authority of India (FSSAI), BIS, FPO, APEDA.			

	6/10 25	11/10/25					
Oct							
	13/10/25	18/10/25					

*Assessment Rubrics

Component	Max Marks
ISA 1	7.5
ISA 2	7.5
ISA 3	7.5
Practical	15
Project	-
Semester End Exam	60