

GUJARAT TECHNOLOGICAL UNIVERSITY

B.E Semester: 3

Food Processing & Technology

Subject Code 131405

Subject Name INTRODUCTION TO FOOD PROCESSING TECHNOLOGY

Sr.No	Course contents
1.	Present State Of Food Industry In India & Abroad: Prospects for future growth in India.
2.	Food as a Source of Nutrients: Function of Food-Physiological, Social, Psychological and specific. Recommended daily allowances for nutrients.
3.	Classifications and Composition of Foods: Plant Foods - Cereals and Millets, Legumes and Pulses, Vegetables, Fruits, Nuts & Oil Seeds, Condiments & Spices. Animal Foods - Eggs, Milk and its products, Meat and Meat Products, Poultry Sea foods. Soft drinks. Semi Processed and Ready to Eat Foods.
4.	Steam Tables, Psychometric Chart: Basic methods and applications
5.	Fundamentals of Mass and Energy balance
6.	Introduction to Units Operation and Equipment and Machinery deployed in Food Processing Industry: Cleaning, Grading, Decorticating, Disintegrating, trimming, peeling, cutting balancing, pulping, size reduction, separation.
7.	Drying and Evaporation: Forming, Heat exchanging, mixing, distillation, extraction, filtration and centrifugation, Material Handling, Pumping and Packaging.
8.	Process Control and Instrumentation: Need and Application.
9.	Food Deterioration
10.	Food Preservation and Processing: Basic Concepts
11.	Food Product Development and Design.
12.	Quality control, Food Evaluation Methods.
13.	Marketing of Foods and Food Products and Statutory laws and requirements of Foods.
14.	Entrepreneurship and industrial training concept.

Reference Books:

1. Food Preservation and Processing, Manoranjan Kalia & Sangita Sood.
2. Food Science, N. N. Potter, C B S Publishers & Distributors.
3. Food Facts & Principles, N. Shankuntala M.& M. Shadakshara S., Wiley Eastern Limited.
4. Unit Operations, K. M. Sahay and K. K. Singh.
5. Engineering of Dairy & Food Products, A. W. Farral.