

SYLLABUS :-

Food Chemistry: Food quality characteristics; Composition and nutritive value of common foods, Structure, properties and metabolic function of food constituents viz., water, carbohydrates, lipids, proteins, enzymes, vitamins, minerals, pigments, colours and flavouring substances; Undesirable constituents in foods; Changes in food constituents during processing and storage. Food Microbiology: Microbial groupings and identification; Nutrient requirements for bacterial culture; Growth and inactivation kinetics; Harmful and beneficial effects of microbes, microbes in food industry; Food spoilage, poisoning and intoxication. Food Process Principles: Basic principles of food preservation and processing; Preservation of food by removal or supply of heat, dehydration, irradiation, addition of chemicals and fermentation; CA/MA storage; Water activity and food stability. Food Technology: Technological processes for industrial manufacture of selected foods of commercial importance from plants and animal sources viz., Jam, Jelly, Marmalade, Pickles, Carbonated beverages, Fruit beverages; Hydrogenated vegetable oil, Tea, Coffee, Cocoa; Margarine, Bakery and Confectionery products; Textured plant protein; Breakfast cereals; Butter, Ice cream, Condensed milk, Cheese, Milk powder, Malted foods and low fat spread. Food Laws and Standards: Food additives; Food packaging; Quality control in food industry.