

4261- FOOD RESOURCES									
Teaching Schedule Per Week			Progressive Assessment		Examination Schedule (Marks)				
Lectures	Practical	Credits			Theory		Practical Ex.	Total	
3	-	3	25	-	3hrs	100	-	125	
Pre-requisite		Source	Semester	Theory	Test	Total	TW	PR	Gr Total
Nil		FOD		-	-	-	100	-	100

Rationale: This is an introductory subject to Food Technology, wherein the student will be introduced to three distinct topics, i.e. Nutrition, Agricultural and other products of India and the present position of Food Technology in the Country and the World. This will enable the student to appreciate, in the later semesters, the different aspects of Food Technology. In nutrition, he/she will be made aware of different food habits and the importance of balanced diet in human health. A survey of agricultural/fishery and other resources will give him an insight into raw materials that he will be processing, properties and suitability of different products. An overview of the economy of the country w. r. t. production, needs and exports of raw and processed food will enable him/her to appreciate present and future requirements.

COURSE CONTENT	Hrs	Mks
1. FOOD NUTRITION & FOOD ADDITIVES		
Staple food: definition and regional differences in India, Major dietary components.	5	8
Classification of foods based on nutritional value. Balanced diet: definition, balanced diet of high-income, middle-income, and low-income group.		
Food Additives: Types of food additives, their role in food industry and their uses.	3	8
2. SURVEY OF COMMODITIES.	7	12
Nutritional importance varieties, methods of handling, processing, storage, and transport as apply to. Cereals: Wheat, Paddy, Barley, and Maize. Pulses: Bengal gram, Green gram, Black gram, Peas, Soya bean. Oilseeds: Groundnut, cottonseed, Mustard, Sesame, Soya bean, Coconut. Nuts: Cashew nut, Walnut, Almonds, Apricot.		
3. FRUITS & VEGETABLES	6	12
Present scenario in India, nutritional importance, classification, varieties, methods of handling, outline of processing, storage and transportation.		
4. ANIMAL PRODUCTS.	6	10
Processing, preservation and storage of: Meat products, Poultry products, Dairy products.		
5. MARINE PRODUCTS.	6	10
Fish farming, Fishing gear, fishing vessels, transportation of fresh fish, cold storage and freezing of fish, curing of fish.		
6. SPICES & FLAVOURS.	2	6
Processing, uses and storage.		
7. TEA, COFFEE.	3	6
Types, processing, packaging and storage.		
8. SUGAR, STARCH, SALT, OIL & FATS.		
Source of supply and method of manufacture.	2	6
Oils & Fats: Difference between the two, oil extraction and refining, Hydrogenation.	2	6
9. FOOD PROCESSING INDUSTRIES & FOOD STATUS.		
Major food processing industries of India and range of products manufactured.	2	6

Food Status: India – Production, needs and exports..	2	4
Traditional Indian Foods of Commercial Importance: Ingredients and processes for manufacture of Idli, Dosa, and Rice flakes.	2	6
Total	48	100

REFERENCE BOOKS.

1. Handling and storage of food grains to tropical sub-tropical areas by D. W. Hall.
2. Handling, transportation and storage of fruits and vegetables, by L. Rya-ll W. I. Ipton.
3. Our food by M. Swaminathan and R. K. Bhagwan.
4. Nutrition and health, ICMR Bulletin.
5. Traditional Foods – CFTRI Publication.

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