

## LECTURE SCHEDULE

**Department: Dairy Technology**

**Courses No.: DTT-322**

**Courses Title: Food technology I**

**Credit Hrs.: 3 (2+1)**

**Course Teacher: Bipin Kumar Singh**

### Theory

S. No.	Topics to be covered	No. of Classes
1	Status of food processing industries in India and abroad, magnitude and inter- dependence of dairy and food industry, prospects for future growth in India.	01
2	Harvesting, transportation and storage of fruits and vegetables.	01
3	Post harvest processing of fruits and vegetables: Peeling, sizing, blanching, Canning of fruits and vegetables, Drying and freezing of fruits and vegetables.	02
4	Juice processing: General steps in juice processing, role of enzymes in fruit. Juice extraction, equipments and methods of fruit juice extraction, preservation of fruit juices.	02
5	Fruit juice clarification, concentration of fruit juices, fruit juice powders.	02
6	Fruit juice processing; Orange and tangerine, Lemon and lime juice, Apple juice, Grape juice, Nectars, pulpy juices, tropical blends, Vegetable juices.	02
7	Manufacture of Jam, Jelly and Marmalade: Role played by pectin, sugar and acid in jellied fruit products.	02
8	Fruits and vegetable preserves, Glazed, Crystallized fruits	01
7	Tomato based products: Juice, puree, paste, sauce, ketchup. Pickles: Principle of pickling, technology of pickles.	02
9	Beverages: Classification, scope, carbonated non-alcoholic beverages and their manufacture. Fruit beverages and drinks, additives for fruit based beverages.	02
10	Coffee: Production practices, structure of coffee/cherry.	02
11	Coffee processing including roasting, grinding, brewing extraction, dehydration, aromatization, instant coffee.	01
12	Tea: Tea leaf processing, green, red, yellow, instant tea.	02
13	Technology of confectionery foods: Candies, Chewing gums and bubble gums, Toffees, Caramels, Standards of confectionery products. Chocolate products: Cocoa bean processing, chocolate liquor, Standards of confectionery products.	02
14	Functional foods: Introduction, Phytochemicals, Milk ingredients as nutraceuticals, fiber-rich food products etc.	02
	Total	26

**Practical (DTT-322)**

<b>S. No.</b>	<b>Practical to be covered</b>	<b>No. of Classes</b>
1	Manufacture of toffees and caramels.	01
2	Testing the efficacy of blanching process.	01
3	Drying of fruits and vegetables.	02
4	Preparation of fruit based drinks and beverages: Ready-to serve drink, Nectar, Squash.	02
5	Whey-fruit based beverages.	02
6	Manufacture of fruit jam. Manufacture of fruit jelly. (2)	02
7	Manufacture of chocolate confections.	01
8	Manufacture of tomato ketchup/tomato sauce. Manufacture of soups.	02
9	Manufacture of fruit preserve.	01
10	Manufacture of candied fruits.	01
11	Manufacture of fruit bar.	01
12	Manufacture of pickles.	01
	Total	17