



## **CERTIFICATE COURSE IN FOOD TECHNOLOGY**

**Course Code: RFT/JTC01**

### **About Course:**

Food Technology has revolutionized the food habits of the people in our country by offering cooked and secured packaged foods in attractive forms. Consumption of processed foods is noticeable across almost all sections of the population. And so, the market for processed food is growing very fast.

### **SALIENT FEATURES**

- Provides knowledge in food science and the principles underlying food processing, industrial management practices, preservation techniques, packaging methods, etc.
- Gives candidates a thorough basic understanding of production processes.
- Enables them to design novel processing approaches and to undertake product development.
- Enables the student to gain a basic understanding of the physical and chemical properties of food and its subsequent behavior of food and food ingredients under different processing conditions.
- Teaches the student to investigate the basic nature of food and its nutritional, physical and chemical properties, to develop new and safe food products, control and management of the quality of processed foods.

### **CAREER PROSPECTS:**

- They can be placed as food technologists to ensure and monitor the quality and hygiene of food products in their contamination and adulteration prevention units in food production units
- A Food Technologist can hold various positions of responsibility in public and private sectors such as Supervisors, Assistant Managers, Production Managers, Food Packaging Manager, R & D personnel, Food Scientist, Food Development Manager, etc
- A Food Technologist is welcomed in the R&D departments in various food manufacturing companies to work as a sensory scientist to monitor organic properties like aroma, flavor, etc
- Quality Assurance Manager, Production Manager, Laboratory Supervisor, Food Packaging Manager or as a technician in food processing and packaging industry or even

as a research associate in premier institutes, universities and research and development units are some of the other job opportunities for a Food Technologist.

**Course covered:**

**Module 1: Govt.Food Regulations**

- Introduction to general food labeling requirements
- Nutrition labeling
- Label formats, claims
- Trans fat labeling, health claims
- Safety assessment of food substances
- Color Additive Statutory and Regulatory Provisions

**Module 2: Food Microbiology**

- Microorganisms important in food
- Microbiology of spoilage & preservation of food
- Microorganisms causing food born diseases.
- Microbiological examination of bacteria in food products.
- Identification of different bacteria
- Confirmatory biochemical tests
- Quality testing
- GMP/GLP, International agencies

**Module 3: Food Biochemistry**

- Determination of protein and non-protein nitrogen of food.
- Determination of reducing sugar and non-reducing sugar.
- To estimate iodine value, acid value, saponification value, Reichert Missiel number of fats and oils.
- To estimate the moisture content in food

**Module 4: Food Processing & quality control**

- Determination of food adulteration in various food samples.

- Drying rate characteristic of food materials and rehydration characteristics.
- Parboiling of paddy and determination of milling characteristics.
- Preparation of ice cream.
- Assessing the quality of jam, jelly, fruit juice

**Module 5: Food analysis & processing technology**

- Estimate of additives in food sample as Boric acid, benzoate, SO<sub>2</sub>, formaldehyde
- Determination test Gelatinisation of starch, Pectin strength of fruit jelly.
- determine browning of cut vegetables.
- Identification Coal-Tar dyes (Acidic) in food sample by Dyeing wool method
- identify Caramel, Cochineal, Turmeric, Annatto dye in fruit/vegetable or their products.
- To analyse titratable acidity of fruit juice.
- To study effect of cooking, addition of acid & salt on vegetables.
- To dry fruits & vegetables and to determine their quality aspect.
- To prepare Tomato juice, puree and sauce, pickles and to determine their quality