

**OBJECTIVES: After successful completion of the course, the students will be able to:**

- Describe and introduce the principles and methods of food quality control and assurance
- Understand the methods of quality control and assurance in foods.
- Apply and use the principles and selection of panelists for sensory evaluation and quality management system.

**COURSE OUTCOMES:**

- Identify and examine the methods for measuring food attributes.
- Understand and estimate the principles of sensory evaluation of food products.
- Acquire skills in selection and training of sensory panel.

**UNIT-I:** Food Quality – Definition- Food Quality and its need in food industry - Food Quality control objectives- Importance – Functions of quality control – Stages of quality control in Food industry- Methods of quality control – Quality attributes- Classification of quality attributes.

**UNIT-II:** Food quality assurance: Theoretical and practical considerations, description of different systems: GAP, GMP, TQM, ISO, Indian Food Standards – Voluntary and Obligatory Standards (PFA, FPO, MMPO, BIS, AGMARK etc) Codex Alimentations, WHO, Worldwide Food Safety issues. Fair Average Quality (FAQ) specification for food grains, ISO 9000series.

**UNIT-III:** Sensory evaluation: Requirements and methods –Sensory parameters: Color, flavor, texture, Taste, aroma, general and overall acceptability –Subjective and objective test of sensory parameters (Differential test, Rating test, Sensory threshold test)

**UNIT-IV:** Quality assessment of Food materials i.e. Cereals, Pulses, Fruits, Vegetables products – selection method, Food Standards- Food packaging and labeling methods – Recent trends

**UNIT-V:** Quality assessment of Food materials i.e. Meat, Poultry, Egg, Processed food products- selection method, Food Standards- Food packaging and labeling methods - Recent trends

**REFERENCE:**

1. Manay,S and shadaksharamasamy, Food Facts and principles, New age International.(p) publishers, New Delhi.
2. Srilakshmi, B., 2002, Food Science, 2nd edition, New Age International private limited. New Delhi.
3. Siva sankar,B.(2013)Food processing and preservation 2<sup>nd</sup> edition, Prentice Hall, Pvt, Ltd.
4. Swaminadhan,M., Food Science, Chemistry and Experimental foods, Bappco publishers, Banglore,2004
5. Ranganna S, Hand book of Analysis and Quality-Fruits and Vegetable products, Tata McGraw Hill, New Delhi, 1986.

**CO-CURRICULAR ACTIVITIES Mandatory**

1. Visit to food processing industries to understand the principles and methods of quality control and assurance in foods.
2. Visit to food testing lab or any agency of food standards.