## FNS 456 FOOD SAFETY AND QUALITY CONTROL

39 Hr (13×3 units)

## **Course outcome:**

At the end of this course the students will be able to-

- CO 1. Describe the importance of quality control system in foodplants.
- CO 2. Classify the different types of food labeling and label claims
- CO 3. Understand the different food laws including national and international laws.
- CO 4. Know the importance of various mandatory and voluntary quality systems in food industry.
- CO 5. Know the common testing methodologies for food adulterants and toxicants

Unit I: Quality control and quality assurance: Importance and functions, statistical quality control. TQM, GMP, GLP and HACCP its implementation in various food industries. Concept of Codex Alimentarious, ISO system, Sensory evaluation-introduction, panel screening, Sensory and instrumental analysis in quality control, IPR and Patents.

**Unit II:** Methods of quality, assessment of food materials: Fruits, vegetables, cereals, dairy products, meat, poultry, egg and processed food products. Sanitation and hygiene, FSSAI. AGMARK (BIS) systems. Differences between mandatory law and optional rules.

**Unit III:** Food labeling and label claims. Law on label claims and punishments. Food adulteration, Common testing methodologies for food adulterants and toxicants.

## **REFERENCES**

- Early. R. 1995. Guide to Quality Management Systems for the Food Industry, Blackie, Academic and professional, London.
- Gould, W.A and Gould, R.W. 1998. Total Quality Assurance for the Food Industries , CTI Publications Inc. Baltimore.
- Bryan, F.L. 1992. Hazard Analysis Critical Control Point Evaluations A Guide to Identifying Hazards and Assessing Risks Associated with Food Preparation and Storage -World Health Organization, Geneva.
- Manuals of Food Quality Control. 2 Additives Contaminants Techniques Food and Agricultural Organization 1980, Rome.
- Singhal, RS., Kulkarni PR., DV. Rege, 1997, Hand Book of Indices of food Quality and Authenticity, wood head Publishing Ltd.