

# **AMFT08 FOOD SAFETY, QUALITY AND REGULATION**

## **UNIT-1 INTRODUCTION TO FOOD SAFETY AND SECURITY**

- 1.1 Hygienic design of food plants and equipments,
- 1.2 Food Contaminants (Microbial, Chemical, and Physical),
- 1.3 Food Adulteration (Common adulterants),
- 1.4 Food Additives (functional role, safety issues), Food Packaging & labeling.
- 1.5 Sanitation in warehousing, storage, shipping, receiving, containers and packaging materials.
- 1.6 Control of rats, rodents, mice, birds, insects and microbes.
- 1.7 Cleaning and Disinfection, ISO 22000- Importance and Implementation

## **UNIT-2 FOOD QUALITY**

- 2.1 Various Quality attributes of food,
- 2.2 Instrumental, chemical and microbial Quality control.
- 2.3 Sensory evaluation of food and statistical analysis.
- 2.4 Water quality and other utilities.

## **UNIT-3 QUALITY CONTROL**

- 3.1 Critical Quality control point in different stages of production including raw materials and processing materials.
- 3.2 Food Quality and Quality control including the HACCP system.
- 3.3 Food inspection and Food Law,
- 3.4 Risk assessment- microbial risk assessment, dose response and exposure response modelling,
- 3.5 Risk management, implementation of food surveillance system to monitor food safety, risk communication

## **UNIT-4 INDIAN AND GLOBAL REGULATIONS**

- 4.1 FAO in India, Technical Cooperation programmers,
- 4.2 Biosecurity in Food and Agriculture,
- 4.3 World Health Organization (WHO), World Animal Health Organization (OIE), International Plant Protection Convention (IPPC)

## **UNIT-5 CODEX ALIMENTARIUS COMMISSION**

- 5.1 Codex India- Role of Codex Contact point,
- 5.2 National Codex contact point (NCCP),
- 5.3 National Codex Committee of India- ToR, Functions, Shadow Committees etc.

## **References Books**

- 1 Handbook of food toxicology by S. S. Deshpande, 2002
- 2 The food safety information handbook by Cynthia A. Robert, 2009
- 3 Nutritional and safety aspects of food processing by Tannenbaum SR, Marcel Dekker Inc., New York 1979.