

## 2.18 30718 FOOD SAFETY

### UNIT-1

- 1.1 Introduction to Food Safety Definition
- 1.2 Types of hazards, biological, chemical, physical hazards
- 1.3 Factors affecting Food Safety
- 1.4 Importance of Safe Foods

### UNIT-2

- 2.1 Food Hazards of Physical and Chemical Origin Introduction
- 2.2 Physical Hazards with common examples
- 2.3 Chemical Hazards(naturally occurring ,environmental and intentionally added ),
- 2.4 Packaging material as a threat, Impact on health, Control measures

### UNIT-3

- 3.1 Food Hazards of Biological Origin Introduction
- 3.2 Indicator Organisms
- 3.3 Food borne pathogens: bacteria, viruses and eukaryotes
- 3.4 Seafood and Shell fish poisoning, Mycotoxins

### UNIT-4

- 4.1 Management of hazards, Need, Control of parameters
- 4.2 Temperature control, Food storage

### UNIT-5

- 5.1 Hygiene and Sanitation in Food Service Establishments, Introduction
- 5.2 Sources of contamination, Control methods using physical and chemical agents
- 5.3 Waste Disposal, Pest and Rodent Control, Personnel Hygiene

### UNIT-6

- 6.1 Food Safety Management Tools, Basic concept
- 6.2 Prerequisites- GHPs, GMPs, HACCP, ISO series,
- 6.3 TQM, concept and need for quality, components of TQM, Kaizen.
- 6.4 Risk Analysis Accreditation and Auditing

### UNIT-7

- 7.1 Microbiological criteria Microbiological standards and limits ( for processed food, water),
- 7.2 Sampling, Basic steps in detection of food borne pathogens, Water Analysis

### UNIT-8

- 8.1 Food laws and Standards, Indian Food Regulatory Regime
- 8.2 Global Scenario, Other laws and standards related to food

## UNIT-9

- 9.1 Recent concerns, New and Emerging Pathogens,
- 9.2 Genetically modified foods, Transgenics,
- 9.3 Organic foods • Newer approaches to food safety

### Reference books:

1. Lawley, R., Curtis L. and Davis,J. The Food Safety Hazard Guidebook , RSC publishing, 2004
2. De Vries. Food Safety and Toxicity, CRC, New York, 1997
3. Marriott, Norman G. Principles of Food Sanitation, AVI, New York, 1985

