

## OPEN ELECTIVE

### FNE 463 - FOOD SAFETY

39 Hr (13× 3 units)

**Unit I:**Food Quality: importance and functions of quality control. Methods of quality, assessment of food materials-fruits, vegetables, cereals, dairy products, meat, poultry, egg and processed food products. Food adulteration and food safety. HACCP, Sensory evaluation-introduction, panel screening,

**Unit II:**Sampling and specification of raw materials and finished products, Concept of Codex Alimentarius/USFDA/ISO 9000 series, rules and regulations for waste disposals. Food laws and standard, PFA, AGMARK

**Unit III:**Food packaging: Definitions, objectives and functions of packaging and packaging materials. Packaging requirements and selection of packaging materials; Types of packaging materials.

#### REFERENCES

- Food Science & Experimental Foods- MS Swaminathan – Ganesh &Co
- Food Science – B Srilakshmi, New Age International publication
- Modern Processing, Packaging& Distribution System for Food, AP Frank, AVI Van nonstand Reinhold.co.

**Unit I:**Principles of food preservation, methods of food preservation,Asepsis,removal of micro-organisms,maintenance of aseptic condition,classification of food for processing, chemicals in food preservation,food irradiation,concept of hurdle technology, Microwave heating

**Unit II:**Preservation of food by high temperature-Pasteurization,sterilization, Canning. Preservation by low temperature-refrigeration, freezing, freezedrying, freezer burn

**Unit III:**Food dehydration and concentration: methods of drying and concentration, equipments for drying/dehydration, factors affecting drying process

#### REFERENCES

- The Technology of Food Preservation- N W Desrosier& JN Desrosier, AVI Publication
- Food Processing- VH. Potty & BM J Mulki Oxford & IBH Publications
- Food Science & Experimental Foods- MS Swaminathan – Ganesh &Co
- Food Science – B Srilakshmi, New Age International publication
- Modern Processing, Packaging& Distribution System for Food, AP Frank, AVI Van nonstand Reinhold.co.

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