Subject Code : P8HME3

HOME SCALE FOOD PRESERVATION

UNIT – I:

Basic Principles of Food Preservation meaning, objectives and basic principles of food preservation (Asepsis, Removal, anaerobic Conditions)

Unit – II : Food Spoilage

Food Spoilage and its prevention
Causes, Types (Physical, Enzymatic and Microbial – Moulds, Yeast and Bacteria)

Unit – III : Food Preservation Using High and Lower Temperature

Principles, Types, Methods and advantages of each.
High temperature Canning process, Principles involved, Spoilages encountered, aseptic canning.
Low Temperature :-
Refrigeration – Principles and Working Systems.
Freezing – Principles, Methods, Advantages and disadvantages.

Unit – III : Food Preservation using high and low temperature

Principles, types, methods and advantages of each.
High temperature – Canning process, principles involved, spoilages encountered, aseptic canning.
Low temperature :
1. Refrigeration – Principles and Working systems.
2. Freezing – Principles, Methods, Advantages and Disadvantages.

Unit – IV :

Food Preservation using drying, dehydration and radiation Principles, advantages, mechanical devices and methods employed for drying and dehydration. Pretreatment of foods, factors affecting drying and dehydration. Pretreatment of foods, factors affecting drying and dehydration. Radiation – types, uses and safety limits.

Unit – V :

Food Preservation using Chemicals.Types of preservatives, advantages and disadvantages, permissible limits.Related Experience :Preparation of Squashes and Juices. Preparation of jams, jellies, marmalade, Preparation of Pickles, sauces, ketchups, Preparation of dehydrated products. Industrial visit.

Reference :

1) Food, Facts and Principles (Second Edition) - N. Shakundalamanay & M. Shadaksharasamy.
2) Food Processing and Preservation – B.Sivasankar.
3) Food Microbiology (Fourth Edition) - William C. Frazier & Dennis C. Westhoff.