**Subject Code : ECSHMB**

# FOOD PRESERVATION

## Unit – I

Introduction to Food preservation, Importance of Preservation, food Spoilage, Food Poisoning, Food Intoxication, food Infection, Sanitation and health. (Definitions and two examples for each topic). Principles of Food Preservation.

## Unit – II

Food Preservation by use of high temperature – sterilization (canning, aseptic canning, hot packing) pasteurization and blanching.
Food Preservation by use of low temperature – freezing and refrigeration.

## Unit – III

Food Preservation by using evaporation and drying – factors influencing evaporation process, sundrying, artificial drying, Drying equipments – Hot air drier, drying by contact with heated surface, dehydration of vegetables, fruits, meat, fish, egg and milk.
Food Preservation by irradiation – Alpha, Beta & Gamma radiations.

## Unit – IV

Food Preservation by fermentation & pickling – Types of fermentation, wines, beer, ale, cider, vinegar, vinegar making, preparation of yeast starter, pickled fruits and Vegetables, Sauerkrant, Olives, Pickled Meat.
Food Preservation by sugar concentrates – concentrated but moist, jelly, jam, marmalade, candied and glazed fruits, sweetened condensed milk.

## Unit – V

Food additives and chemicals.
Definition, functional characteristics of chemical additives. Acids, Bases & their salts, leavening agents, Preservatives – Organic acids & their salts, inorganic salts, wood smoke, spices & condiments Antibiotics and other chemical preservatives. Packaging & Labeling.

## Reference Books :

Modern Technology on Food Preservation - Niir Board, Asia Pacific Business Press, Delhi.
Food Processing and Preservation - B.Sivasankar, Prentice Hall of India Pvt. Ltd., New Delhi.
Food Microbiology - Frazier