

5th SEMESTER
SKILL ENHANCEMENT COURSE (BOTANY)
BO517S2: PRESERVATION OF FRUITS AND VEGETABLES
CREDITS: THEORY-2, PRACTICALS-2

THEORY (2 CREDITS)

UNIT 1: NEED AND SCOPE FOR PRESERVATION OF FRUITS AND VEGETABLES:

Concept and significance; Nutritional importance of fruits and vegetables; Fruit and vegetable spoilage, causes and consequences; Principles and methods of fruits and vegetable preservation; Selection of fruits and vegetables for preservation; Processing of fruits and vegetables: Preparation of fruit candy, chutney, sauces and ketchups; Tomato products-Juice, paste, puree, sauce/ketchup, cocktail; Preparation of jam, jellies, Marmalades (Apple, plum, peach).

UNIT 2: PREPARATION AND PRESERVATION OF FRUITS AND VEGETABLES

Drying and dehydration of fruits and vegetables: Merits of Sun drying and Dehydration, Drying of Apricot and tomato; Pickles and causes of spoilage of pickles; Preparation of mixed vegetable pickles, tomato juice, sauce/ ketchup. Freezing-Types of freezing; Packing and storage of dehydrated products, Containers for packing; Canning and bottling of fruits and vegetables: General steps in canning of fruits and vegetables, Canning of apple pear and cherry; Requirements for a small scale fruit and vegetable based processing plant.

PRACTICAL WORK (2 CREDITS):

1. Preparation of tomato juice, sauce/ketchup
2. Preparation and preservation of apple juice, orange juice and apple jam
3. Preparation of syrups and brines
4. Test of blanching
5. Sun drying and dehydration of apple, pear, tomato and brinjal
6. Canning of fruits and vegetable
7. Preparation of preservatives
8. Quality evaluation of fruits and vegetable products
9. Identification of machinery and equipments required for establishing a cottage scale fruit preservation unit.

SUGGESTED READINGS:

1. Home scale preservation of fruits and vegetables-CFTRI Lab Manual.
2. The technology of Food preservation by Desrosier.
3. Food science by N.N.Potter.
4. Fruits vegetable products by Girdhari Lal, Siddhapa & Tandon.
5. Preservation of fruits & vegetables:Girdhari lal,G.S.S.Siddapa and G.L..Tandon IARI New Delhi.
6. Fruit and vegetable preservation by Srivastava.
7. Post- harvest Technology of Fruits & Vegetables-L.R.Verma & V.K.Joshi.
8. Post- harvest management & processing of fruits and vegetables-Satish Kumar Sharma New India Publishing agency-New Delhi.
9. Food preservation principles and practices:Arti Sankhla,Renu Mogra and Kusum Babel.Agrotech Publishing Academy Udaipur- India.