1. VACA-01: Processing of fruits and vegetables for value addition

Total Hours: 30

Course objective:

1. To develop knowledge, skills, attitude and professional qualities in the students
2. required for value addition of fruits and vegetables.
3. To give hands-on training on processing and value addition.
4. To build capacity and confidence in participant students on value addition of fruits and vegetables

Course outcomes

1. To be aware of the history, importance, and principles of preservation.
2. To learn the prospects and scope of the fruit and vegetable processing sector.
3. To develop skills in various processing methods.
4. To be aware of developing procedures for various fruits and vegetable products.
5. To acquaint with organoleptic evaluation of processed products.
6. To understand the technologies of fruit and vegetable processing and its role in providing better quality produce to the consumer.

SYLLABUS

Unit I

History, importance, and scope of preservation of fruits and vegetables, Principles of preservation, Methods of preservation-Physical, Chemical, Fermentation, other methods.

Unit II

Role of preservatives, fruit color, flavors, chemicals, salt, sugar, and vinegar. Study of containers for packaging of preserved products- Tin cans, Glass containers, plastic and polythene pouches and their advantages and disadvantages.

Unit III

Canning of fruits and Vegetables, Drying and Dehydration of fruits and Vegetables Preparation of Juice from Fruits and Vegetables, Squash & cordial. Sensory or organoleptic evaluation of processed products.

Unit IV

Preparation of Jam, Jelly, and marmalade, Preparation of unfermented fruit beverages, juice Ready to serve (RTS), nectar, Fruit juice powder, and fruit juice concentrate. Preparation of preserve and candy from Fruits and Vegetables. Preparation of tomato products - Tomato juice, Tomato puree, and paste, Tomato sauce and ketchup, Tomato chutney, Tomato soup, Tomato chilli sauce.

References:

1. Bhattacharjee, S. K. and De, L. C. 2005. Post Harvest Technology of Flowers and Ornamentals Plants. Ponteer Publisher, Jaipur, India.
2. Bhutani RC. 2003. Fruit and Vegetable Preservation. Biotech Books
3. Fellows, P. J. 1998. Food Processing Technology: Principles and Practices. Ellis Horwood.

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