

## FRUITS & VEGETABLE PROCESSING

### Credit Distribution, Eligibility and Pre-Requisites of The Course

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (If any)
		Lecture	Tutorial	Practical/ Practice		
Fruits and Vegetable Processing	2			2	XII (PCM/PCB)	

#### Learning Objectives

1. To provide hands-on training to students for the entire process of selection, preparation, packaging, & presentation of variety of fruits & vegetable products.
2. To impart skills of scale-up production of fruits & vegetable products & by products for setting their own enterprise.

#### Learning Outcomes

1. This course will impart knowledge & skill of creating variety of value-added products of Consumer's choice & need.
2. The course will be suitable for enhancing the level of processing, level of value addition, share in global food trade & employability.

#### Syllabus

##### Unit I:

Practicals based on different processing/ preservation techniques.

1. Preparation of canned fruits /vegetables
2. Preparation of chips from potato/bittergourd/apples etc.
3. In bottle pasteurization of fruit juices, nectars, purees etc.
4. Preparation of fruit squashes
5. Preparation of fruit cordials
6. Preparation of fruit jams/jellies
7. Preparation of fruit nectars
8. Preparation of mango/chilli/ lime pickle
9. Preparation of Tomato puree & product
10. How to plan a startup, budgeting, marketing / case study/ entrepreneur (anyone of the above)
11. To study the Regulation, Licensing & registration of particular

## Essential Readings

- Girdharilal., Siddappaa, G.S and Tandon, G.L.(2009). Preservation of fruits & vegetables. ICAR, New Delhi.
- Thompson, A.K., (2003). Fruits and vegetables; Harvesting, handling and storage. Blackwell Publishing.

## Suggested Readings:

- Crusess, W.B. (2004). Commercial Unit and Vegetable Products. W.V. Special Indian Edition. Agrobios India.
- Manay, S. and Shadaksharaswami, M. (2004). Foods: Facts and Principles. New Age Publishers.
- Ranganna S.(2007). Handbook of analysis and quality control for fruits and vegetable products. Tata Mc Graw-Hill publishing company limited, Second edition.
- Srivastava, R.P. and Kumar, S. (2006). Fruits and Vegetables Preservation- Principles and Practices. 3rd Ed. International Book Distributing Co.
- Somogyi, L.P., Ramaswamy, H.S. and Hui, Y.H. (1996). Biology, Principles and Applications. Volume 1. Technomic Publishing Company, Inc.

## Teaching Learning Process:

- Interactive Classes
- Experiential Learning
- Hands on training
- Standardization of product formulation
- Promote critical thinking to create new products
- Presentation of product report

## Assessment Methods:

- Continuous evaluation of laboratory work and record file.
- Viva-voce, tests & graded assignments
- Presentation (Power point by students)
- Semester end University examination.

**Key Words:** Standardization, Dehydration, Pasteurization, TSS, Tomato puree, fruit jam, jelly, Nectars, Squash, Cordial, Homogenization, Packaging, Shelf-life, acceptability.

## Skill Development and Job Opportunities: Justification

The food processing sector is one of the largest sectors in India in terms of production, growth, consumption, and export. However, there exists a definite lack in processing and storage infrastructure and skilled manpower, which are essential to reducing the waste and enhancing the value addition and shelf life of the farm products. The government has ambitious plans to increase the level of processing, value addition and share in global food trade. This will have a spike in the requirement for qualified and trained fruits & vegetable processing professionals. The main objective of having this paper is to impart knowledge of processing various value added fruits & vegetable products which is ultimately used to enhance the employability of any candidate studying the paper including food technology graduates.