

Fruit and Vegetable Processing

Class: B.Sc.III

DURATION: Three Months

Name of Co-ordinator: Miss Jadhav M.H.

Department of Food Processing and Packaging

1. Title: Fruit and Vegetable Processing
2. Year of implementation: 2020

Structure of Skill Development Course

Duration	Theory Hours	Practical Hours	Total Hours	Credits	No. of students in batch
3 Month	20	30	50	02	30

Syllabus

Learning Objectives:

1. To identify and select fresh fruits and vegetables with the help of checklist.
2. To understand common food processing equipment such as pulper, sealers, juice extracting machines, autoclaves, corking machines etc.
3. To identify and select fresh fruits and vegetables with the help of checklist
4. To prepare preserve (murabba), candy, crystallized and fruit bar
5. To Prepare fruits/ vegetables pickles with oil/ salt/ vinegar/ spices, determine acidity content.

Theory Syllabus (20 Hrs)

Unit I: Introduction of Fruits and Vegetables

Definition of Fruits and vegetables, Fruits and vegetables as available in different parts of the country, season of maturity. Constituents of food, importance of fruits & Vegetable in the diet. Selection of raw materials including fruits and vegetables for preparation of various products. Study of various equipment: usage, care/maintenance and precautions.

Unit II: Preparation of preserves, candies, crystallized and glazed, fruit bars and Pickles

Definition of preserves, candied fruits, glazed fruits, crystallized fruits, methods of preparation of Pickles, chutneys and sauces, Different types of pickles. Methods of preparation, curing techniques, defects and remedies.

Practical Syllabus (30 Hrs)

List of Experiments: -----24 hr

- 1 Identifications of Fruits and vegetables.
- 2 Identification of spices and food additives used in fruits and vegetable processing
- 3 Study of common food Study of various equipment: Processing equipment such as pulper, sealers, juice extracting machines, autoclaves, corking machines etc.
- 4 Preparation of preserves, candies fruits
- 6 Preparation of crystallized fruits
- 7 Preparation of and glazed and fruit bars.
- 8 Preparations of different types of pickles from fruits and vegetables.

Project/ Field Visits/ Industrial Visit-----06 hr

Learning Outcomes:

1. The student should able to identify and select fresh fruits and vegetables with the help of checklist.
2. Student should able to understand common food processing equipment such as pulper, sealers, juice extracting machines, autoclaves, corking machines etc.
3. Student should able to identify and select fresh fruits and vegetables with the help of checklist
4. Student should able to prepare preserve (murabba), candy, crystallized and fruit bar

5. Student should able to Prepare fruits/ vegetables pickles with oil/ salt/ vinegar/ spices, determine acidity content.

Recommended Books:

1. **Preservation of fruits and vegetables: principles and practices**
Dr. Shrivastav and Dr. Sanjeev kumar, Hardback Published, 2002.
2. **Preservation of Fruits and Vegetables** Girdhari Lal, Siddhapa and Tondon, New Delhi : Publications and Information Division, Indian Council of Agricultural Research, 2011.
3. **Fruit and Vegetable Processing**, Sri S. Chenna Kesava Reddy, Acharya NG Ranga Agricultural University.
4. **Fruit and Vegetables Harvesting, Handling and Storage**, A. K. Thompson, Blackwell Publishing Ltd, 2003.
5. **Handbook of Fruits and Fruit Processing**, Editor Y. H. Hui Associate Editors J'ozsef Barta, M. Pilar Cano, Todd W. Gusek, Wiley-Blackwell publisher, 2006.

BOS Sub Committee:

1. Dr. S. S. Wadikar
2. Miss .M. H. Jadhav
3. Miss. G. M. Kulkarni
4. Miss. M. S. Chavan