

K.V.R. GOVT. COLLEGE FOR WOMEN(A), KURNOOL.
B.A, B.Com & B.Sc. PROGRAMMES

Revised CBCS w.e.f. 2020-21
SKILL DEVELOPMENT COURSES

Science Stream

Syllabus of
FRUITS AND VEGETABLES PRESERVATION

Total 30 hrs (02h/wk),

02 Credits & Max Marks: 50

Learning Outcomes:

On successful completion of this course the students will be able to;

- 1. Identify various types of fruits and vegetables and explain their nutritive value.*
- 2. Understand the fragile nature of fruits and vegetables and causes for their damage.*
- 3. Explain various methods of preservation for fresh fruits and vegetables.*
- 4. Get to know the value-added products made from fruits and vegetables.*

Syllabus:

Unit – 1 : Introduction to fruits and vegetables

06 Hrs.

1. Fruits: Definition, elementary knowledge on types of fruits (fleshy and dry) with local /common examples.
2. Vegetables: Definition, elementary knowledge on types of vegetables (root, leafy, stem, flower and fruit) with local/ common examples.
3. Importance of fruits and vegetables in human nutrition.
4. Concept of perishable plant products – maturation and spoilage, shelf life; preservation –definition and need for preservation of fruits and vegetables.

Unit – 2 :Preservation of Fruit

09 Hrs.

1. Fruits – ripening and biological aging; storage and preservation concerns.
2. Preservation of fresh fruits at room temperature and in cold storage.
3. Fruit preservation at room temperature as juices, squashes and syrups.
4. Preservation of fruits by application of heat; making of fruit products (jams, jellies and fruit slices in processing factories).
5. Preservation by dehydration (Eg. banana chips), application of sugar (Eg. mango candy), application of salt (pickling).
6. Fruit preservation by freezing – storage at the lowest temperatures.

Unit – 3 :Preservation of vegetables

09 Hrs.

1. Vegetables – losses after harvesting and causes; problems in handling and storage.
2. Modern methods of packaging and storage to reduce losses.
3. Trimming of vegetables and packing in cartons; dehydration technique -factoryprocessing.
4. Making of vegetable products (flakes/chips of potato and onion; garlic powder).
5. Frozen vegetables – Carrots, Cauliflower, Okra and Spinach.
6. Preservation of sliced vegetables in factories by canning andbottling.7.

Suggested Co-curricular activities (6 Hrs.)

1. Assignments/Group discussion/Quiz/Model Exam.
2. Invited lecture and demonstration by local expert
3. Exhibition of various types of locally available fruits and vegetables.
4. Hands on training on handling and packaging methods of fresh fruits and vegetables.
5. Hands on training on making fruit juices.
6. Display of various preserved fruit products available in local markets.
7. Hands on training on making of potato, yam, onion chips.
8. Display of various preserved vegetable products available in local markets.
9. Watching videos on preservation of fruits and vegetables.
10. Visit to Horticulture University or research station to learn about value added productsoffruits and vegetables.

Suggested text books/reference books :

1. Giridharilal, G. S. Siddappa and G.L.Tandon(2007) *Preservation of Fruits andVegetables*, Indian Council of Agri. Res., New Delhi
2. Srivastava, R.P., and Sanjeev Kumar (2019) *Fruit and Vegetable Preservation :Principles and Practices*, CBS Publishers & Distributors Pvt., Ltd., New Delhi
3. Thompson, A.K. (1995) *Post Harvest Technology of Fruits and Vegetables*. BlackwellSci.,U.K.
4. Verma, L.R. and V.K. Joshi (2000) *Post Harvest Technology of Fruits and Vegetables*. Indus Publ., New Delhi