VIKRAMA SIMHAPURI UNIVERSITY::NELLORE

Common Framework of CBCS for Colleges in Andhra Pradesh
(A.P. State of Council of Higher Education)

SYLLABUS OF

FRUITS AND VEGETABLES PRESERVATION

SEMESTER - II

AS PART OF
SKILL DEVELOPMENT COURSES
UNDER CBCS FRAMEWORK WITH EFFECT FROM 2020-21

PROGRAMME: FOUR-YEAR UG PROGRAMME

B.A,B.Com, B.Sc, B.C.A and B.B.A Programmes

w.e.f 2020-21

SEMESTER - II

SKILL DEVELOPMENT COURSES

Syllabus of

FRUITS AND VEGETABLES PRESERVATION

SCIENCE STREAM

Total 30 hrs (02h/week) **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 (E.g. banana chips), application of sugar (E.g. 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 -factory processing.

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 and bottling.

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 products of fruits and vegetables.

Suggested text books/reference books:

1. Giridharilal, G. S. Siddappa and G.L.Tandon(2007) Preservation of Fruits and Vegetables, 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. Blackwell Sci., U.K.

4. Verma, L.R. and V.K. Joshi (2000) Post Harvest Technology of Fruits and Vegetables. Indus Publ., New Delhi

**** NOTE : Preferred teaching Department is Botany***

FRUITS AND VEGETABLES PRESERVATION
MODEL QUESTION PAPER

Max. Marks: 50 **Time: 2 hrs (120 Minutes)**

SECTION- A

(5x4M=20 Marks)

Answer any **four** questions. Each answer carries **5**marks:

(Note: At least 1 question should be given from each Unit)

1. Shelf life
2. Scientific names of two vegetables and two fruits
3. Importance of vegetables in human nutrition
4. Biological ageing of fruits
5. Pickling
6. Fruit preservation methods
7. Four leafy vegetable and their scientific names
8. Need for fruit and vegetable preservation

SECTION B
(3x10 M = 30 Marks)

Answer any **three** questions. Each answer carries **10** marks:

(At least 1 question should be given from each Unit)

1. What is a fruit? Explain different types of fruits.
2. Explain about fruit preservation by adding sugar and through dehydration
3. Write an essay on different types of vegetables.
4. What are the perishable plant products and they are preserved?
5. Write an essay on processing of vegetables.

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