CLUSTER UNIVERSITY SRINAGAR

SYLLABUS (FYUP UNDER NEP 2020)

Offered By Department of FOOD SCIENCE & TECHNOLOGY

Semester 1st Skill Enhancement Course (SEC)

Course Title: Fruit and Vegetable Processing-I

Course Code: UGFST22S101 **Max. Marks 100**
Credits: 4 (Theory: 1, Practical: 3) **Theory External: 15; Min Marks: 06**
Contact Hrs: 105 (Theory: 15, Practical: 90) **Theory Internal (Continuous Assessment): 10 Marks, Min Marks: 04**
Practical Experimental Basis= 45 Marks, Min. Marks: 18
Practical Internal (Continuous Assessment): 30 Marks, Min. Marks: 12

Objective:

- To acquaint the students with different postharvest changes in fruits and vegetables.
- To acquaint the students with factors leading to physiological losses in fruits and vegetables.
- To acquaint the students with various methods of storage of fruits and vegetables.

Course outcome:

After completing the course, the students will be able to:

1. Carry out the quality analysis of fruits and vegetables.
2. Make better selection of fruits and vegetables for processing.
3. Create better storage possibilities for fruits and vegetables for shelf-life enhancement.

THEORY:

UNIT I

- Composition of fruits and vegetables.
- Selection of fruits and vegetables for processing.
- Postharvest changes in fruits and vegetables.
- Maturity indices of fruits and vegetables.
- Storage of fruits and vegetables.
- Controlled Atmosphere Storage.
- Concept of cold chain management of horticulture produce.

PRACTICALS:

UNIT II

- Determination of titrable acidity of fruits/vegetables
- Determination of moisture content of fruits/vegetables
- Determination of total soluble solids of fruits/vegetables
- Studying physical quality parameters of fruits and vegetables

UNIT III

- Physiological loss in fruits and vegetables
- Different methods of peeling.
- Preparation of synthetic vinegar.
- Preparation of preserve.

UNIT IV

- Preparation of candy.
- Preparation of pickle.
- Demonstration of fruit and vegetable processing equipment.
- Visit to controlled atmospheric plant

REFERENCES

i. Preservation of Fruits and Vegetables by Girdhari Lal, G.S. Siddappa and G.L. Tendon.
ii. Fruit and Vegetable Preservation-Principles and Practices by R.P. Srivastava and Sanjeev Kumar
iii. Food Science by N.N. Potter
iv. Essentials of Food Science by Vicke A. Vaclavic and Elizabeth W. Christian