6th SEMESTER FOOD TECHNOLOGY (PROCESSING OF FRUITS AND VEGETABLES) SKILL ENHANCEMENT COURSE (SEC)

PFV620S PROCESSING AND VALUE ADDITION OF FRUITS AND VEGETABLES - II

CREDITS: THEORY: 2, PRACTICAL: 2 MAX MARKS: THEORY: 30, PRACTICAL: 30 MIN MARKS: THEORY: 12, PRACTICAL: 12

THEORY (2 CREDITS)

UNIT-I

- Canning and bottling of fruit and vegetables, types of cans, spoilage of canned food.
- > Drying and dehydration of fruits and vegetables. Advantages of drying
- Freezing: methods of freezing, packaging and storage of dried and frozen foods.
- Effect of processing (canning, drying and processing) on quality and nutritional profile of foods.

UNIT-II

- Modern pack-house operations and mechanization in apple and walnut processing.
- ▶ Introduction to FASSI, Registration of fruit and vegetable'processing unit and licencing.
- FASSI standards of food products (fruit and vegetable products)
- Good manufacturing practices (GMP) and good handling practices (GHP)
- Economic analysis and project formulations.

PRACTICAL AND DEMONSTRATIONS (2 CREDITS):

- 1. Demonstration of canning machinery
- 2. Fabrication of cans
- 3. Seaming and testing of cans
- 4. Canning of fruits and vegetables (cherry, pea, mushroom)
- 5. Cut-out analysis of canned foods
- 6. Dehydration of various fruits and vegetables
- 7. Modem pack-house operations and mechanization in walnut processing
- 8. Visits to various food processing units.

SUGGESTED READINGS:

- 1. Siddappa, G.S. and Tendon, G. L. (2009). Preservation of Fruits and Vegetables. ICAR, Publications, New Delhi.
- 2. Srivastava, R.P. and Kumar, Sanjeev (2019). Fruit and Vegetable Preservation-Principles and Practices. 3rd Ed, CBS, Publishers, New Delhi
- 3. Rehman, M. S. (2020). Handbook of Food Preservation. CRC Press
- 4. Vaclavic, V. A. and Christian, E.W. (2020). Essentials of Food Science, 4^{ih} Edition. Springer International Publishers, London.
- 5. Potter, N. N. and Hotchkiss, J. H. (2007). Food Science 5th Ed. CBS Publishers & Distributors Pvt. Ltd.

4th to 6th SEMESTERS FOOD TECHNOLOGY (PROCESSING OF FRUITS AND VEGETABLES)

INTERNSHIP/TRAINING

The internship/training component consists of 18 credits of practical training. The training may be imparted by the Food industry/mentor institute/Hub College/affiliating university whichever is feasible on the basis of infrastructure required/nearness to the college where the skill courses are taught. The training must be given for a period of not less than 45 working days with at least 6 working hours for each day. The training may be imparted either in a single go or in splits of at least 15 days at a time preferably during vacations.

(CREDITS: 18)