

FNP 510: PRINCIPLES OF FOOD PROCESSING

Course outcome:

At the end of this course students will be skilled in-

- CO 1. Several techniques in food processing and physical, chemical and nutritional changes during freezing.
- CO 2. Know about processes such as freezing and thawing and also the changes occurring in these processes.
- CO 3. Comprehend effects of physical and chemical changes during processing and also the nutritional loss occurred.
- CO 4. Identify the loss during processing and also the techniques to minimize the loss

1. Determination of physical and chemical changes during freezing
2. Nutritional changes of food during food processing
3. Determination of changes occurring at the time of thawing
4. Estimation of freezing point of different solids/ liquid and semi solid foods
5. Physical changes during the evaporation and drying

FNP 511 POST HARVEST TECHNOLOGY

Course outcome:

At the end of this course students will be able to-

- Describe the grading and post harvest processing of seasonal fruits and vegetables.
- Write about storage pests and methods to overcome the wastage.
- Identify the importance of different packaging materials.
- List out different types of microorganisms responsible for food spoilage and steps to overcome it.

1. Grading of seasonal fruits and vegetables
2. Post harvest processing of fruit/vegetable
3. Study on storage pests/spoilage of selected food sample
4. Study on Total Soluble Solids of different fruits
5. Study of different post harvest spoilage microbes of fruits and vegetables
6. Waxing of fruits
7. Study of different packaging materials

FNP 512 FUNCTIONAL FOODS

Course outcome:

At the end of this course students will be able to-

- Describe functional food and its role in treating diseases.
- Estimate the secondary metabolites produced by the plant sources using laboratory techniques.
- Identify the process of development of probiotic and prebiotic food product.
- List out the naturally occurring phytochemicals and also their quantification in food.

1. Anti-oxidant content in kokum
2. Estimation of polyphenols in different tea infusions
3. Development of a probiotic yoghurt

4. Development of a prebiotic food product
5. Survey of intake of functional foods by patients suffering from non-communicable disorders