

## FNP 460 ANALYTICAL TECHNIQUES IN FOOD SCIENCE

### Course outcome:

*At the end of this course the students will be skilled on-*

- CO 1. Chromatographic and immunological techniques used to identify different compounds.
- CO 2. Estimating enzyme activity and various factors affecting it
- CO 3. Handling spectrophotometer and its application
- CO 4. Estimating and isolating organic acids and nucleic acids respectively.

1. Factors affecting enzyme activity
2. Chromatographic techniques - paper, TLC, Column
3. Estimation of organic acids
4. Verification of Beer Lambert's Law
5. Isolation of DNA /RNA
6. Immunological techniques

## FNP 461 FOOD PACKAGING

### Course outcome:

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

- CO 1. Understand water vapour transmission rate for different materials.
- CO 2. Identify toxins, pesticides and adulteration in food.
- CO 3. Handel surface sterilization and its application in food handling
- CO 4. Assess food packaging effectiveness using various methods.

1. Assessment of air using Surface Impingement method.
2. Detection of efficacy of surface sterilization using swab and Rinse method.
3. Determination of water vapour transmission rate for different materials.
4. Estimation of toxins and pesticides in food.
5. Detection of adulteration in foods.

## FNP 462 FOOD SAFETY AND QUALITY CONTROL

### Course outcome:

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

- CO 1. Differentiate normal and abnormal biochemical parameters by determination of moisture, ash and acidity of food sample.
- CO 2. Determine water vapor transmission rate and air using Surface Impingement for different materials.
- CO 3. Detect adulteration in foods.
- CO 4. Analyze the safety parameters of food.

1. Determination of moisture in a given food sample
2. Determination of ash in a given food sample.
3. Estimation of acidity of given food sample/beverage
4. Determination of water vapour transmission rate for different materials.
5. Detection of adulteration in foods.
6. Assessment of air using Surface Impingement method.