- SEMETSER:- IV
- COURSE TITLE:- FOOD QUALITY

- COURSE NO.:- FST-2410
- CREDITS:- 2(1+1)

➤ THEORY

| NO. | TOPICS | | |
|-------------|--|----------|--|
| OF UNITS | | LECTURES | |
| 1 | | 1 | |
| 1 | Food quality, its role in industry definition of quality, quality control, factors affecting quality control | 1 | |
| 2 | Quality attributes, dominant attributes, hidden attributes | | |
| 3 | Colour-role of colour in quality spectra, different types of colour measuring instruments | | |
| 4 | Viscosity- types of fluids, different viscometers to measure viscosity | | |
| 5 | Consistency- Methods used to measure consistency of product | 1 | |
| | Difference between viscosity and consistency | | |
| 6 | Size and shape- Its role, method to find shape and size of food and food products | 1 | |
| | products | | |
| 7 | Defects: classification, genetic- physiological defects- structural, off color, character, | 2 | |
| | Entomological defects: holes, scars, lesions, off coloring, curled leaves, | | |
| | Pathological defects | | |
| | Mechanical defects, Extraneous or foreign material defects. | | |
| | Measurement of defects: Improving visibility by dilution, white background, | | |
| | color differences, standardization of conditions, reference standards, counts | | |
| | and measures, isolation of defects by floatation, elution, electronic sorting, Internal defects | | |
| 8 | Texture- Classification, definition and role of firmness, yielding quality, | 2 | |
| | juiciness, chewiness, fibrousness, grittiness, mealiness, stickiness,, measurement | | |
| | of texture/ kinesthetic characteristics by compression, mechanical thumb, nuncture tester, succulometer, shearing by tenderometer, texturometer | | |
| | maturometer, fibro meter, moisture content, by barbender moisture tester, | | |
| | alcohol insoluble solids, color, consistency & sound measurement for kinesthetics | | |
| 9 | Flavour- definition and its role in food auality. Taste. classification. taste | 2 | |
| - | qualities, relative intensity, reaction time, effect of disease, temperature, and taste medium on taste, basic tastes, interaction of tastes | - | |
| | Odour- definition, classification, neutral - mechanisms. olfactorv | | |
| | abnormalities, odor testing, techniques, thresholds, odor intensities | | |

| 10 | Visual, auditory, other senses, vision, audition, oral perception other than taste | 2 |
|----|---|----|
| 11 | Factors influencing sensory measurements: | 2 |
| | between stimulus and perception adaptation. Correlation of sensory and instrumental analysis. | |
| 12 | Quality Measurements: | 2 |
| | Laboratory measurement: types of tests, panel selection and testing environment, serving procedures, instruction to judges, different tests, directional difference tests, classification of difference tests, two-sample tests, three sample tests, multisample tests, comparison of procedures, ranking, scoring, hedonic scaling, dilution procedures, descriptive sensory analysis, contour method, other procedures. Consumer measurement: Factors influencing acceptance and preference, objectives of consumer preference studies, information obtained from consumer study, factors influencing results from consumer surveys, methods of approach, development of the questionnaire, types of questionnaires, serving procedures. Comparison of laboratory panels with consumer panels, limitations of consumer survey | |
| 13 | Quality of raw materials: Physical, Chemical and microbial quality. | 1 |
| | flavour, appearance. | |
| 14 | Factors influencing the Food qualities: Soil, field practices, harvesting practices, procedures, packaging, transportation, storage, conditions, processing conditions, packaging and storage conditions of finished products. | 2 |
| 15 | Recording and reporting of quality. | 1 |
| | TOTAL | 22 |

➢ PRACTICALS

| NO. OF UNITS | TOPICS | NO. OF EXPT. | | |
|--------------------|--|-----------------|--|--|
| | | | | |
| 1 | Sensory evaluation of product | | | |
| 2 | Quality evaluation of raw materials. | | | |
| 3 | Quality evaluation of product for size, shape.I | | | |
| 4 | Determination of viscosity of food products. | | | |
| 5 | Determination of texture | 2 | | |
| 6 | Sensory evaluation of product for taste &flavour | 1 | | |
| 7 | Market testing of products. | 2 | | |
| 8 | Evaluation of food standards. | 1 | | |
| 9 | Determination of color by using Lovibond tintometer | 2 | | |
| 10 | Visit to food factory to know sensory evaluation problems. | | | |
| 11 | Consumer study for food quality. | 1 | | |
| 12 | Visit to fruit and Vegetable market for quality | 1 | | |
| | assessment. | | | |
| | TOTAL | 16 | | |

> Reference Books:

| • | Principles of Sensory Evaluation of Food | Maynard A –Amerine, Rose Marie | |
|---|--|--------------------------------|--|
| | | Pangborn, Edward B. Roessler. | |
| • | Quality Control for Food Industry | Krammer & Twigg. | |
| • | Quality Control in Food Industry | S. N. Herschdogrfer | |
| • | Advances in Food Research | Academic Press. Vol - I. | |