

4277- FOOD STANDARDS AND QUALITY CONTROL									
Teaching Schedule Per Week			Progressive Assessment		Examination Schedule (Marks)				
Lectures	Practical	Credits			Theory		Practical Ex.	Total	
2	4	6	25	25	3 Hrs	100	-	150	
Pre-requisite		Source	Semester	Theory	Test	Total	TW	PR	Gr Total
4267		FOD		75	25	100	50	-	150

Updated-5/1/2001

Rationale: In any commercial food-processing unit, quality control occupies a very important position in the organised working of the unit. Implementation of an effective quality control programme ensures maintenance of high quality standards and efficient performance. This course includes routine quality control procedures and laboratory tests followed in various food processing industries and covers the food laws and standards in our country. It will also provide necessary theoretical and practical knowledge of different areas of quality control.

COURSE CONTENTS	Hrs	Mks
1. INTRODUCTION	1	-
2. SAMPLING FOR QUALITY EVALUATION	1	5
3. LABORATORY REQUIREMENTS Layout and requirements of quality control laboratory.	2	4
4. REVIEW OF FOOD STANDARDS IN THE COUNTRY (F.P.O, P.F.A, ETC.)	1	3
5. QUALITY CONTROL IN FRUIT & VEGETABLE PROCESSING Review of guidelines for setting up of fruit and vegetable units given by F. P. O with reference to sanitation and hygiene requirements. Process control in manufacture of tomato products, fruit beverages, pickles, jams, jellies and marmalade.	3	12
6. QUALITY CONTROL IN CEREALS PROCESSING Testing of wheat flour for acceptability and evaluation of baking quality. Common defects in bread, biscuits and cakes and remedial measures to be taken.	4	14
7. QUALITY CONTROL IN CARBONATED BEVERAGE INDUSTRY Testing of water for use in production. Testing of finished product. Process control.	4	14
8. QUALITY CONTROL IN CONFECTIONERY MANUFACTURE Process control in sugar confectionery and chocolate confectionery.	3	8
9. QUALITY CONTROL IN MILK PROCESSING Rapid tests for evaluation of quality of milk. Dairy sanitation.	3	8
10. QUALITY CONTROL IN SEAFOOD PROCESSING Quality control measures in seafood canning and freezing industry.	2	8
11. SENSORY EVALUATION Need for sensory evaluation. Criteria for selection of taste panel members. Determination of threshold level. Outline of taste panel methods: Difference tests and rating tests.	4	12

12. PLANT SANITATION

4 12

General aspects- Importance of sanitation- General programmes for plant sanitation including measures to prevent rodent and insect infestation. Indian specifications regarding general and specific hygiene conditions required in a dairy and canning industry. C. I. P. and H. A. C. C. P.

Total

32 100

PRACTICALS

- 1) Planning of laboratory layout for food processing unit with requirements of glassware and equipment.
- 2) Analysis of squash, jam and tomato ketchup based on F. P. O specifications.
- 3) Testing of wheat flour based on P. F. A specifications
- 4) Evaluation of baking quality of wheat flour.
- 5) Test baking
- 6) Testing quality of roasted, ground coffee based on P. F. A specifications
- 7) Evaluation of quality of confectionery products based on P. F. A specifications

REFERENCE BOOKS

1. Quality Control for the Food Industry- Vol-I & II by A. Krammer AVI Publications.
2. Food Quality Assurance by W. A. Gould, AVI Publications.
3. Prevention of Food Adulteration Act (1954) with rules.
4. Chemical Analysis of Food Products by M. B. Jacobs.
5. I. S. I. Specifications for various Food Products.
6. The Chemical Analysis of Foods by David Pearson Churchill Livingstone Publications.
7. Handbook of Analysis and Quality Control of Fruit and Vegetable Products by Dr. S. Ranganna, Tata, Mc Graw Hill Publications.