

## FOOD STANDARDS AND QUALITY CONTROL

Sem	Subject Code	Category	Lecture		Theory		Practical	Credits
IV	19CPFN4A	Core Paper X	Hrs/sem	Hrs/Per week	Hrs/sem	Hrs/Per week	-----	4
			105	7	105	7		

### COURSE OBJECTIVES

#### To enable students

- A) To gain knowledge on food safety and food laws.
- B) To study about quality control and common food standards.

### COURSE OUTCOMES

On the successful completion of the course, students will be able to

CO Number	CO Statement	Knowledge Level (K1-K4)
CO1	Introduction to Food Quality Control	K1,K2,
CO2	Government Regulations In Quality Control	K2, K3, K4
CO3	Food Products and Food packaging	K2, K3, K4
CO4	General guidelines on Safety and Food Hazards	K2, K3, K4
CO5	Food Adulteration and test for identification	K2, K3, K4

Knowledge level: K1 – Remember, K2-Understand, K3- Apply, K4-Analyse.

### MAPPING WITH PO

COS	PO1	PO2	PO3	PO4	PO5
CO1	M	M	S	S	S
CO2	M	M	S	S	S
CO3	M	M	S	S	S
CO4	M	M	S	S	S
CO5	M	M	S	S	S

S-Strong; M-Medium, L- Low

## **UNIT-I**

**21 Hours**

**QUALITY CONTROL:** Objectives, Importance, functions of quality control, stages of quality control in food industry.

**FOOD QUALITY ASSURANCE:** Design of company quality assurance program, Microbiological concerns.

Managing quality in supply chain and marketing of food products.

## **UNIT-II**

**21 Hours**

**GOVERNMENT REGULATIONS IN QUALITY CONTROL:** FAO/WHO codex Alimentarius commission, PFA, AGMARK, BIS, FPO, fair average quality (FAQ) specification for food grains, ISO 9000 series.

**HACCP:** Background, current status, structured approach, principles, benefits and limitation.  
**Consumer Protection Act (CPA)**

## **UNIT-III**

**21 Hours**

**FOOD PACKAGING:** Food packaging and labelling various methods. Recent trends in Packaging and labelling.

**CEREALS AND PRODUCTS** - bread, biscuits, cakes products.

**FRUITS PRODUCTS:** Jam, juices, squashes, ketchup, sauce.

**OILS AND FATS:** Coconut oil, groundnut oil, gingelly oil, palm oil, sunflower oil, vanaspathi, Butter, ghee

**MILK AND PRODUCTS:** Skimmed milk powder, partly skimmed milk powder, condensed sweetened milk. Other products - coffee, tea, sugar, honey, toffees.

## **UNIT-IV**

**21 Hours**

**FOOD SAFETY:** Meaning of food safety

**IMPORTANCE OF FOOD:** Quality and safety for developing countries.

**PATENT:** Definition, requirements, patent law in India, administrator, need for patent system, advantages, precautions to be taken by applicants, patent procedures, non-patentable.

**FOOD HAZARDS:** Physical, Chemical, Biological hazards associated with food types. Effect of processing and storage on microbial safety.

## **UNIT-V**

**21 Hours**

**FOOD ADULTERATION:** Adulteration of food - common adulterants and tests to detect common adulterants.

**Distribution of Marks:** Theory – 25 (IA) + 75 (univ. exam) = 100 Marks

**TEXT BOOKS:**

S.NO	AUTHORS	TITLE	PUBLISHERS	YEAR OF PUBLICATION
1	Sivasankar, B	Food Processing and preservation 2nd edition	Prentice Hall, Pvt, Ltd	2013
2	Srilakshmi, N	Food Science	New Age International Private Ltd.	2002

**REFERENCE BOOKS:**

S.NO	AUTHORS	TITLE	PUBLISHERS	YEAR OF PUBLICATION
1	Swaminathan, M	Food Science, Chemistry and Experimental Foods	Bappco Publishers	2004
2	Chandrasekhar, U	Food Science and Applications in Indian Cookery	Phoenix Publishing House Private Ltd.	2002
3	Adams, M.R. and Moss, M.O.	Food Microbiology	New Age International (P) Ltd.	2005
4	Fellow, P.	Food Processing Technology – Principles and Practices	CRC Press Woodland Publishers	2000
5	Sommers, C.H. and Xveteng Fan	Food Irradiation Research and Technology	Blackwell Publishing	2006

**WEB SOURCES:**

Link:[https://webstor.srmist.edu.in/web\\_assets/srm\\_mainsite/files/downloads/april\\_2016\\_curriculum\\_syllabus\\_fsqm\\_m.tech\\_2015\\_16.pdf](https://webstor.srmist.edu.in/web_assets/srm_mainsite/files/downloads/april_2016_curriculum_syllabus_fsqm_m.tech_2015_16.pdf)

**TEACHING METHODOLOGY**

- Chalk and board teaching
- Study Assignment method
- Active learning method
- Group discussions
- PPT
- Seminars
- Other Group activity

**SYLLABUS DESIGNER:**

- Ms. R. TAMILSELVI, Head and Assistant Professor, Department of Foods and Nutrition