

**Department of Food Processing and Packaging**  
**Revised Syllabus of Advanced Diploma Courses (PG)**

Advanced Diploma Course (I Year)

1. Title: Food Safety and Quality Management
2. Year of Implementation: 2021
3. Duration: One Year
4. Pattern: Semester
5. Medium of Instruction: English
6. Contact hours: 7 hours/week for I Year, 8 hours/week for II
8. Structure of Course:

Year	Semester	Paper No.	Paper Code	Contact Hours	Credits (1Credid =12H)	Marks		
						Semester/ Annual Exam	Internal	Total
I	I	PT I	ADMFP 101	30	2.5	50	25	75
	II	PT II	ADMFP 202	30	2.5	50	25	75
		PL I	ADMFP L101	120	5	100	50	150
		PP I	ADMFP101	60	5	100	-	100
	Total			240	15	300	100	400
II	III	PT II	ADMFP 301	30	2.5	50	25	75
	VI	PT IV	ADMFP 404	30	2.5	50	25	75
		PL II	ADMFP 202	120	5	100	50	150
		PP II	ADMFP 202	60	5	100	-	100
	Industrial/Incubation Training			20	2	-	-	-
	Total			260	17	300	100	400
Total			500	32	600	200	800	

**Semester I**

**ADMFT 101: Food Safety and Quality Management  
(Contact Hrs: 30 Credits: 2.5)**

Learning Objectives:

Students will be able to

1. Learn the food regulatory regime
2. Learn the Risk assessment of various foods

**Unit I: Indian Food Regulatory Regime (15)**

PFA Act and Rules, Global Scenario, Codex Alimentarius Commission (CAC), CAC : Implications, Other International Standards Setting Bodies Block 3 Export & Import Laws and Regulations, FTDR Act, 1992 and Foreign Trade Policy, Plant and Animal Quarantine, Customs Act and Import Control Regulations Other Laws and Standards Related to Food, Other Laws Related to Food Products, National Agencies for Implementation of International Food Laws and Standards, Accreditation System for Conformity Assessment Bodies

**Unit II: Food Safety and Quality Management Systems (15)**

Introduction to Food Safety, Food Safety System, Total Quality Management, Project Management , Risk Analysis, An Introduction to Risk Analysis, Risk Management, Risk Assessment, Risk Communication , HACCP History, Background and Structure, Pre- requisites, Principles, Case Studies Block 4 Other Food Safety Practices, Good Agriculture Practices, Good Animal Husbandry Practices and Good Manufacturing Practices Good Retail Practices, Good Transport Practices and Nutrition Labelling, Traceability Studies

Learning Outcomes:

After completion of the unit, Student will

1. Understand the food regulatory regime
2. Know the risk assessments of various foods.

**ADMFPL 101: (Practical)**

Learning Objectives:

Students will be able to

1. Identify the GMPs and GHPS
2. Develop FSMS system for various industries.

List of Practical's

1. Identifying the key focus areas for GHP & GMP
2. Closure plans for identified gaps in a food factory/ food outlet.
3. Development of the process flow for the Food establishment including all the inputs, outputs & interim loops
4. Development of methodology (decisions tree) as per clause 7.4.4 of ISO 22000 for a food establishment.
5. Development of FSMS
6. Development of OPRP(operational pre-requisite programme) and development of HACCP Plan (critical limits ( including rationale for limits), monitoring procedure, correction and corrective measures.
7. Managing unsafe product.

Learning Outcomes:

Students can

1. Identify the GMPs and GHPS
2. Develop FSMS system for various industries.

Semester II

**ADMFPT 202: Food Safety and Auditing**  
(Contact Hrs: 30 Credits: 2.5)

Learning Objectives:

Students will be able to

1. Learn the management and Accreditation and auditing.
2. Learn the logistics and supply chain management.

**Unit I: Management Systems, Auditing and Accreditation (15)**

Introduction to Management Systems, Auditing, Standard and Accreditation, Laboratory Quality Management System, An Overview and Requirements of ISO 17025, Requirements Specific to Food Testing Laboratories – Physical and Chemical Parameters, Requirements Specific to Food Testing Laboratories – Biological Parameters, General Topics: Related to Food Testing Laboratories, Retailer Standards, BRC Food and BRC IOP Standards : An Overview, IFS: International Food Standard Unit 18 SQF :1000 SQF: 2000, Global Gap and India Gap,

**Unit II: Logistics and Supply Chain Management (15)**

Logistics and supply chain management - Scope, Significance and Drivers; Basic Model - Primary and Secondary Activities; Role and Challenges of Logistics and supply chain management in food industry. Demand and supply management, Forecasting techniques, Strategic planning for material sourcing, Outsourcing strategies, Warehouse strategies, Inventory models and control techniques, Various sources of distribution channels, Distribution models, 3PL and 4PL, Distribution network planning, Modes of transportation, Design of transshipment, Containerization. UNIT IV PACKAGING AND INFORMATION TECHNOLOGY, Applications of Packaging in logistics, Types of packaging and packaging materials, Export & import packaging and labeling details, Reverse Supply Chain, Information Technology and the Supply Chain ( ERP, Bar-coding, RFID, GPS, E-Procurement).

Learning Outcomes:

After completion of the unit, Student is able to

1. Understand the management and Accreditation and auditing.
2. Understand the logistics and supply chain management.

**ADMFPL 201: (Practical):**

Learning Objectives:

Students will be able to

1. Learn the Accreditation and Auditing System
2. Learn the various laws of food safety and hygiene

List of Practical's

1. Application of ISO 9001 Model.
2. Understanding Process approach
3. defining quality policy and objectives,
4. Correction Corrective action and preventive action
5. Continual improvement
6. Food laws : Hygienic requirements for manufacturing premises as per legal requirements
7. Food laws: Design label for any food product

Learning Outcomes:

Students will be able to

1. Understand the Accreditation and Auditing System
2. Understand the various laws of food safety and hygiene

**ADMFP101 (Project)**