

Rayat Shikshan Sanstha's  
Yashavantrao Chavan Institute of Science, Satara (Autonomous)  
Department of Food Processing and Packaging  
(2020-21)

**Advance Diploma course in Food Analysis and Quality Assurance**

<b>Year</b>	<b>Paper No and Name</b>	<b>Contact hours</b>	<b>Credits</b>	<b>Marks</b>
1	C BFPE T 101: Food Chemical Analysis And Chemical Safety of Foods	48	4	100
	C BFPE L102: Practical	96	4	100
	C BFPE P103: Project	24	2	50
	<b>Total</b>	<b>168</b>	<b>10</b>	<b>250</b>
2	D BFPE T 101: Food Microbial Analysis And Microbial Safety Of Foods	48	4	100
	D BFPE L102: Practical	96	4	100
	D BFPE P103: Project	24	2	50
	<b>Total</b>	<b>168</b>	<b>10</b>	<b>250</b>
3	AD BFPE T 101: Food standards and specification	48	4	100
	AD BFPE L102: Practical	96	4	100
	AD BFPE P103: Project	24	2	50
	<b>Total</b>	<b>168</b>	<b>10</b>	<b>250</b>
<b>Total</b>		<b>504</b>	<b>30</b>	<b>750</b>

## **AD BFPE T 101: Food standards and specification**

### **Learning Objectives-**

- 1) To understand the Food standards and their Specification.
- 2) To understand the Import and export policies in India.
- 3) To understand the Inspectional requirements for food business operators.
- 4) To understand Special establishment inspection in food processing

### **UNIT I- Food standards and Specification**

HACCP applications in different food sector

Food surveillance: International and national practices, procedure and protocols, food alerts, traceability and food product recall. Risk analysis: risk assessment, management and communication. Food standards and Specification: need for auditing, increasing importance of HACCP based Codex Standards (GATT).

### **UNIT II- Import and export policies in India**

Export and import of food in India: Introduction, import and export policies, FDA import policy, export-import policy, export control systems.

Import intelligence and alert systems, packaging and labeling, specifications and certifications. Case studies and judicial pronouncements, procedure for investigations and filing of cases by food safety regulator as per FSS act.

### **UNIT III -Inspectional requirements for food business operators**

Inspection of food establishments, manufacturing units: Food regulatory enforcement and compliance through inspection.

Inspectional requirements for food business operators: general inspection procedures, biological inspection of establishments.

### **UNIT IV Special establishment inspection in food processing**

Special establishment inspection part I: Processing of fruits and vegetables, bakery products, milk and milk products, meat and meat products, fish and fish products and chocolate and cocoa.

Special establishment inspection part II: Candy and chocolate processing units, fats and oil processing units, frozen food establishments, food canning plants, beverage industry, retail meat shops, food ware houses and food service distribution

### **Learning Outcomes-**

- 1) The student should be able to understand the Food standards and their Specification.
- 2) The student should be able to understand the Import and export policies in India.
- 3) The student should be able to understand the Inspectional requirements for food business operators.
- 4) The student should be able to understand Special establishment inspection in food processing.

## Reference books-

1. The training manual for Food Safety Regulators. (2011) Vol.III, Food Safety regulations and food safety management. Food Safety and Standards Authority of India.
2. New Delhi. 2. Foreign Trade Policy (27th August 2009 to 31st March 2014), Department of Commerce, Ministry of Commerce and Industry, Government of India.
3. Foreign Trade Policy (27th August 2009 to 31st March 2014), Department of Commerce, Ministry of Commerce and Industry, Government of India
5. Mortimore, S., and Wallace, C., (2005) HACCP: A practical approach, 2nd Ed, Aspen Publication
- Surak, J.G., and Wilson, S. (2007) American Society for Quality, 2nd Ed., Quality Press
6. The training manual for Food Safety Regulators. Vol.II- Food Safety regulations and food safety management. (2011) Food safety and Standards Authority of India. New Delhi.

## Practical-

### Learning Objectives

- 1) To understand the Hazard Analysis and Critical Control Point (HACCP) of different food products.
- 2) To understand the Auditing of a selected food industry / establishment and submission of report
- 3) To understand the Food safety in manufacturing sector, in retail sector, in catering sector.
- 4) To understand the Food safety regulation, working with the enforcement agency

1. Hazard Analysis and Critical Control Point (HACCP) of Milk and milk products
2. Hazard Analysis and Critical Control Point (HACCP) of Cereals and cereal products
3. Hazard Analysis and Critical Control Point (HACCP) of Meat and meat products
4. Hazard Analysis and Critical Control Point (HACCP) of Fish
5. Hazard Analysis and Critical Control Point (HACCP) of Bakery products
6. Hazard Analysis and Critical Control Point (HACCP) of Fruits and vegetables
7. Auditing of a selected food industry / establishment and submission of report
8. Data collection on the quality of raw materials
9. Data collection on the processing parameters and documentation
10. Data processing
11. Preparation of model
12. Validation of model
13. Making recommendation to the Industry.
14. Food safety regulation, working with the enforcement agency.
15. Food safety in manufacturing sector, in a food processing industry.
16. Food safety in retail sector, in a food retailing company.
17. Food safety in catering sector, in a catering organization.
18. Food safety auditing- working with a food safety auditing company.
19. Candidates will be trained in the selected topics in any of the four areas in an industry or a company and will submit project at the end and will be evaluated through viva voce.

**Learning Outcomes-**

- 1) The student should be able to understand the Hazard Analysis and Critical Control Point (HACCP) of different food products.
- 2) The student should be able to understand the Auditing of a selected food industry / establishment and submission of report
- 3) The student should be able to understand the Food safety in manufacturing sector, in retail sector, in catering sector.
- 4) The student should be able to understand the Special establishment inspection in food processing.

**Reference books-**

1. The training manual for Food Safety Regulators. (2011) Vol.III, Food Safety regulations and food safety management. Food Safety and Standards Authority of India.
2. New Delhi. 2. Foreign Trade Policy (27th August 2009 to 31st March 2014), Department of Commerce, Ministry of Commerce and Industry, Government of India.
3. Foreign Trade Policy (27th August 2009 to 31st March 2014), Department of Commerce, Ministry of Commerce and Industry, Government of India
5. Mortimore, S., and Wallace, C., (2005) HACCP: A practical approach, 2nd Ed, Aspen Publication
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6. The training manual for Food Safety Regulators. Vol.II- Food Safety regulations and food safety management. (2011) Food safety and Standards Authority of India. New Delhi.

**AD BFPE P103: Project course: Related to the Syllabus (24 periods)**