









Sector Food Processing

Sub-Sector Packaged Foods

Occupation Processing-Packaged Foods

Reference ID: FIC/Q8502, Version - 4.0 NSQF Level: 3

Spice Processing Technician

Published by

Food Industry Capacity & Skill Initiative (FICSI)

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First Edition, January 2023

This book is sponsored by Food Industry Capacity & Skill Initiative (FICSI)

Printed in India by FICSI

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Shri Narendra Modi Prime Minister of India

Acknowledgements

FICSI is thankful to all the organisations and individuals who have helped us in the preparation of this facilitator Guide.

We extend our special thanks to the Ministry of Food Processing Industries (MoFPI) and National Institute of Food Technology Entrepreneurship and Management (NIFTEM) for providing funds and their unequivocal support.

We also wish to extend our gratitude to all those who reviewed the content and provided valuable inputs for improving the quality, coherence, and content presentation of chapters.

About this Book -

This book is designed to provide skill training and/ or upgrade the knowledge and basic skills to take up the job of 'Spice Processing Technician' in 'Food Processing' sector. All the activities carried out by a specialist are covered in this course. Upon successful completion of this course, the candidate will be eligible to work as a 'Spice Processing Technician'.

This Facilitator Guide is designed to enable training for the specific Qualification Pack (QP). Each National Occupational Standards (NOS) is covered across Unit/s.

Key Learning Objectives for the specific NOS mark the beginning of the Unit/s for that NOS.

- 1. FIC/N9026: Prepare for production
- 2. FIC/N8515: Produce Spice and Seasoning
- 3. FIC/N9901: Implement health and safety practices at the workplace
- 4. FIC/N9902: Work effectively in an organisation
- 5. SGJ/N1702: Optimize resource utilization at workplace
- 6. DGT/VSQ/N0101: Employability Skills





Key Learning Outcomes



Resources



Example



Activity

Objectives



Summary

ask

Ask





Role Play





Practical



Team Activity



Notes



Say



_____Methodology

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Guidelines for the Trainer

As a Trainer, follow the below guidelines:

- Understand your job thoroughly
 - Reach the venue 15 minutes before the training session.
 - Please ensure you have all the necessary training tools and materials for the training session (learning cards, sketch pens, raw materials, etc.).
 - Check the condition of your training equipment, such as a laptop, projector and, camera, relevant tools (depending on the training site).

Before starting any training program, the trainer should concentrate on the below crucial pointers,

- Use best practices and methods of training.
- Create awareness of the quality of work done.
- Explain how to minimise waste.
- Ensure that the participants practice safety measures and use proper PPE.
- Make sure the participant adopts the basic ergonomic principles.
- Create awareness of housekeeping at regular intervals.
- Explain the influence of productivity as a whole.
- Make the class as interactive as possible by adopting activity-based or scenariobased training methodology.

Understand your participants

You will conduct the training program for a certain period as a trainer. To improve the program's effectiveness, you should understand the mindset of the participants and create a good rapport with them. Maintaining a good working relationship with the participants is always essential to achieve better results from the training program.

Adopt the basic etiquette during training

- Greet the participant and introduce yourself.
- Use a gentle pace of voice/tone while speaking with the participant.
- Explain the need and use of the training program.
- Ask the participants to introduce themselves to the group and help them with communication difficulties.
- Clarify their doubts patiently, and do not get irritated if a participant asks the same question repeatedly.
- Understand the level of participants and train them accordingly.
- Watch the participants at work, and note some pointers of performance.
- Give some hints and easy thumb rules which can be easily understood and remembered.
- Always use the three golden words, "Please", "Thank You", and "Sorry".
- Be positive and professional while giving participants feedback; do not criticize or make fun of their performance.
- Identify the faulty practices of the participants and rectify them as soon as possible.
- Always be a good mentor and observer.
- Do not forget to introduce the topic to be covered in the next class.
- Do not forget to recapitulate the topic covered in the last class.











1. Overview of Food Processing Industry

- Unit 1.1 Introduction to Food Processing Industry
- Unit 1.2 Future Trends and Career Growth Opportunities Available to the Spice Processing Technician.
- Unit 1.3 Roles and Responsibilities of Spice Processing Technician
- Unit 1.4 Terminology Used in the Spice Processing Industry
- Unit 1.5 Policies to be Followed on the Delivery, Health, Safety and Hazard Handling Standards, Integrity, Dress Code, etc.
- Unit 1.6 Importance of Planning Before Starting



Key Learning Outcomes

At the end of this module, you will be able to:

- State the importance of the training program for a Spice Processing Technician
- Discuss the food processing industry and generic sub-sector in brief
- Discuss the career opportunities available to a Spice Processing Technician in the food processing industry
- Explain the terminologies used while conducing audits in the food processing facility
- Elaborate on standard business etiquette in the food processing industry
- Discuss the workflow and departmental organisation in the quality analysis and assurance sector

Icebreaker

Unit Objectives Ø

At the end of the session, the participants will be able to:

- Be familiar with the food processing sub sector and know their position of responsibilities
- Build rapport with fellow participants and the trainer.

- Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide



• Conduct the group activity.

Say 🔓

- Now that we are all familiar with each other's names and actions, each one of you will introduce yourself to us.
- Example. I am _____, coming here from _____, like to _____, love _____ and ___
- Now that we know something about each other. We will try to take only first names while speaking to each other for the rest of our sessions.
- Let us see how interactive we can make this discussion by working together.
- Now trainer will explain the objective of this module.

— Ask 🔤

- Welcome the participants and ask them if they know about each other.
- If not, then let them introduce themselves to each other.
- Ask the participant if they have undergone any training.
- Ask the participant to outline the benefits one would derive from this training.

Activity

Brief

- Each participant is given a blank card (visiting card size). Every participant will write their first name on it, big and bold.
- On the back, they will put down two words or phrases that can be used as conversation starters. For example: Classical singer, Patna resident.

Activity Description

- Divide the class into groups of 4-5 participants. Distribute the blank cards and pens to every participant in the group.
- Give the groups enough time (about 5 minutes) to write their name and conversation starters.
- Now ask the groups to meet each other using the name card and converse with them about the two things on the card.
- Give the groups enough time (10 minutes) to meet every group member and know their names.
- Now ask the groups to start mixing around with other groups. Every few minutes, tell the groups to
- change seats to encourage everyone to meet as many people as possible.

Debrief

- Reassemble the group and have all the participants introduce themselves.
- As each individual is introduced, other participants are encouraged to add the information or details shared earlier in the mixing round.



Discuss

- Was this activity helpful in getting to know some of your fellow participants?
- What were some of the most interesting things discovered during the conversation?

Unit 1.1 - Introduction to Food Processing

Unit Objectives

At the end of the session, the participants will be able to:

- Discuss the size and scope of the food processing industry in brief
- Discuss the role and responsibilities of the Spice Processing Technician.

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide

Do

- Start the class by asking a few questions on processed foods like:
 - Have you picked up any processed foods from the market?
 - What are the readymade food products you have used
- Explain what food processing is and give an overview of the food processing industry in India.
- Talk about the different sub-sectors within the food processing industry.
- Conduct a group activity to introduce the participants to the products developed within various subsectors.
- Initiate a discussion and explain how harvested produce reaches the consumer.
- Discuss the various types of distribution in the local market and export market.
- Discuss the laws and regulations that govern the food industry

Say ᡗ

- Food processing is the transformation of raw components into consumable food products through a series of physical or chemical procedures.
- It includes several procedures such as cleaning, sorting, grading, and packaging to maximise the shelf life, safety, and nutritional content of the food.
- The goal of food processing is to create food products that are convenient, delicious, and safe for ingestion.
- Depending on the type of food and the desired outcome, several procedures such as canning, freezing, drying, and fermenting are used. Food processing has evolved.



- What is Food Processing
- Give examples of some Food Processing industry finished products

Notes for Facilitation

- Enter the class ten minutes before the session begins.
- Welcome and greet the students.
- Take the daily attendance.
- Maintain the record of assessment scores.

– Explain

- Overview of the Food Processing Industry
- Journey of Food from Harvest to Consumer
- Elaborate on the food production cycle
- Overview of the Fruit and Vegetable Secto

Elaborate

- Clarify the food processing with the help of (figure 1.1.1), given in the participant handbook
- Explain the production of the cycle with the help of (figure 1.1.2 Journey of Food from Harvest to Consumer), given in the participant handbook
- Explain the food processing industry with the help of (Fig. 1.1.3: Sub-Sectors of the Food Processing Industry), given in the participant handbook

Activity

Brief

• Each group must come up with a list of products developed by every sub-sector in the food processing industry.

Activity Description

- Divide the class into groups of 4-5 participants.
- Assign a sub-sector to each group.
- Give the groups enough time to discuss the processed foods developed within the sub-sector allotted to them. Also, ask them to list the names of popular brands for that produce.
- Now ask the groups to select one person from themselves who would write down the list of products on the board.
- When that participant comes to the board, other group members tell him the list of products they have thought of.

Debrief

- Summarize the list of processed foods and the sub-sectors.
- Add more products to the list with local examples.

Unit 1.2 Future Trends and Career Growth Opportunities available to the Spice Processing Technician

Unit Objectives



At the end of the session, the participants will be able to:

- Explain future trends available for spice processing technician.
- State career growth opportunities available to the spice processing technician.

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide

Do

- Begin by researching current trends and career opportunities in the spice processing industry. You can use online resources, industry publications, and job postings to gather information.
- Use case studies to help students understand the different career paths available to spice processing technicians. You can find real-life examples of people who have started in similar positions and worked their way up the ladder.
- Invite industry professionals to come speak to your class about their experiences and career paths. This will give students a chance to ask questions and gain insight into the industry.

Say 🔓

- As consumer demand for flavorful and healthy foods continues to grow, the spice processing industry is poised for significant expansion.
- Spice processing technicians will have opportunities for career growth in areas such as quality control, research and development, and production management. Additionally, the use of automation and technology in spice processing is expected to increase, creating further opportunities for technicians with specialized skills

- Ask ask

- What are some emerging technologies in the spice processing industry, and how do you see them affecting the role of the spice processing technician in the future?
- In what ways can a spice processing technician advance their career within the industry, and what are some potential career paths to consider?
- How do you think globalization and international trade may impact the spice processing industry, and what implications might this have for spice processing technicians?

- What are some key skills and competencies that spice processing technicians should develop in order to remain competitive in the job market?
- How can a spice processing technician stay up-to-date with industry trends and best practices, and what resources are available to support ongoing professional development?

	Notes for Facilitation	
--	------------------------	--

- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

Explain 🖓

• Future trends and career growth opportunities available to the Spice Processing Technician

Unit 1.3 - Role and Responsibilities of Spice Processing Technician

- Unit Objectives

At the end of the session, the participants will be able to:

• State the Roles and responsibilities of spice processing technician

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide

Do 🗸

- Provide students with case studies of different scenarios that a spice processing technician might face. Have them work in groups to analyze the situation, identify potential risks, and come up with solutions that the technician could implement to ensure quality and safety.
- Invite a spice processing technician to come speak to the class about their experiences, challenges, and successes. This will provide students with a first-hand account of what it's like to work in the industry, and give them the opportunity to ask questions.
- Set up a spice processing lab where students can practice the different tasks and responsibilities of a technician. This could include weighing and measuring ingredients, blending spices, testing for quality and safety, and recording data.

Say S

- A Spice Processing Technician is responsible for processing and packaging spices to ensure their quality, safety, and freshness.
- They are also responsible for maintaining the cleanliness and safety of the processing equipment, monitoring inventory levels, and ensuring that production quotas are met.
- Additionally, they may be responsible for conducting quality control checks on finished products.

Ask ask

- What are the key duties of a spice processing technician?
- How do spice processing technicians ensure the quality and safety of the spices they work with?
- What kind of equipment and tools are used by spice processing technicians?
- How do spice processing technicians maintain and clean their equipment?
- What are the key skills needed to be a successful spice processing technician?
- What are some common challenges faced by spice processing technicians, and how can they be overcome?

Notes for Facilitation

• Allow maximum participation to answer the questions.

• Explain the correct answers one by one



• Roles and responsibilities of spice processing technician

Unit 1.4: Terminology Used in the Spice Processing Industry

Unit Objectives

At the end of the session, the participants will be able to:

• Explain the terminology Used in the Spice Processing Industry?

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide

Do

- Bring in different spices and have your students taste and smell them. Ask them to identify the spices and describe their flavors and aromas. This will help them become familiar with different spices and their characteristics.
- Provide your students with a variety of spices and have them experiment with different spice blends. This will help them understand the importance of blending and the role it plays in the spice processing industry.
- Assign your students to research and report on a specific spice, its history, cultural significance, and its use in the spice processing industry. This will help them gain a deeper understanding of spices and their importance in food production.

Say 🖸

- Terminology used in the spice processing industry includes technical terms related to various stages of processing, such as cleaning, grading, grinding, blending, and packaging.
- It also includes terms related to the different types of spices, their origin, and quality standards. Understanding these terms is important for effective communication and efficient operations in the spice processing industry.

- Ask

- What's the distinction between a spice and a herb?
- What exactly is the meaning of pungency?
- What does aroma mean in the context of spices?
- Can you describe the distinction between whole and ground spices?
- What does the term 'blending' in spice processing mean?

Notes for Facilitation

• Allow maximum participation to answer the questions.

• Explain the correct answers one by one



• Terminology Used in the Spice Processing Industry?

Unit 1.5: Policies to be Followed on the Delivery, Health, Safety and Hazard Handling Standards, Integrity, Dress Code

Unit Objectives



At the end of the session, the participants will be able to:

- Explain health, safety and hazard handling standards.
- Explain about dress code and integrity of spice processing technician.

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide

Do

- Create a presentation on the policies and their importance.
- Conduct interactive discussions with the learners to get their perspectives on the policies and why they are important.
- Use case studies to help learners understand how the policies are applied in the industry.
- Organize a quiz or a role-playing activity to assess learners' understanding of the policies and their application.
- Encourage learners to ask questions and seek clarifications on any aspects of the policies they may not understand.

Say 🔓

• Every employee is concerned about their health and safety. As a result, following safety guidelines is required to avoid hazards and accidents. Similarly, sanitation and hygiene are the most critical factors when working in the food processing industry.



- What are some of the key policies that spice processing companies should have in place to ensure delivery standards are met?
- How can policies related to health, safety, and hazard handling help to prevent accidents and injuries in the workplace?
- Why is it important for companies in the spice processing industry to have integrity policies in place, and how can they be enforced?
- How can a dress code policy help to ensure that employees present a professional image to customers and other stakeholders?

Notes for Facilitation

- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

1

- What are the standards for health, safety, and hazard handling?
- Can you explain the dress code and the integrity of a spice processing technician?

Elaborate

• Explain the standard practices for dealing with hazards, risks, and cleaning work areas with help of (Fig. 1.1.3 Organisational guidelines to be followed during work), given in the Participant Handbook.

Unit 1.6: Importance of Planning Before Starting Work

Unit Objectives

At the end of the session, the participants will be able to:

• Explain the importance of planning before starting work.

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide

Do

- Discuss examples of situations where lack of planning led to poor outcomes, and contrast with examples of situations where effective planning led to success.
- Have students engage in an activity that requires planning, such as designing a project or solving a problem, and discuss the benefits and challenges of planning in that context.
- Encourage students to develop their own planning strategies and share them with the class, and discuss how different planning approaches can be effective in different contexts.

Say 🔓

• Planning before starting work helps to ensure that tasks are completed efficiently, goals are achieved, and resources are used effectively.

Ask ask

- Why is planning important before starting work?
- What are some common consequences of not planning before starting work?
- How does planning help improve efficiency and productivity?
- What are some key elements of an effective plan?
- Can you give an example of a situation where planning helped prevent a problem or mistake?

- Notes for Facilitation

- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

🗉 Explain 🗟

Importance of planning before starting work

Notes			
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2. Prepare for Spice Production

- Unit 2.1 Planning for spice production
- Unit 2.2 Clean and maintain the work area, machinery & tools
- Unit 2.3 Organize for production



Key Learning Outcomes

At the end of this module, you will be able to:

- Describe the process of production planning.
- Discuss the significance of various process diagrams, product flow diagrams, and other diagrams.
- Describe the process of resource management.
- Describe how to calculate the workforce, raw materials, packaging materials and capacity.
- Please list the different types of equipment and how they are used during the process.
- Discuss the organisation's rules and procedures for cleaning and maintaining production equipment.
- Write out the fundamentals of food safety and sanitation.
- Procedures for waste management at the workplace.
- Make a list of inspection methods for tools, equipment, and machinery.
- Discuss how to assign work or responsibilities to the team

Unit 2.1: Planning for spice production

Unit Objectives

At the end of the session, the participants will be able to:

- Explain the production planning process in spice processing.
- Interpret process diagram, product flow diagram etc.
- Outline best practices to be followed for spice processing.
- Understand the management of resources and required equipment.
- Understand how to maintain tools and equipment used in spice production.

Resources to be Used



- Training kit (Trainer guide, Presentations),
- Whiteboard,
- Marker,
- Projector,
- Laptop,
- PowerPoint Presentation and software
- Flow chart
- Process related documents,
- Grinder, Mills, Pulveriser,
- Sifter, Mortar & pestle,
- Pounding machine,
- De-stoner, Roaster,
- Dryer, Spice blender,
- Protective gloves, Head caps,
- Aprons, Safety goggles, Safety boots,
- Mouth masks, Sanitizer,
- Safety manual
- Participant Handbook

Do

- Explain the importance of planning before starting any production process, including spice production.
- Discuss the different aspects of planning for spice production, such as selecting the right spices, estimating the required quantity, scheduling production, and ensuring availability of raw materials.
- Provide examples of planning tools and techniques, such as production planning software and Gantt charts.

Say | 뎗

- A production plan defines the actions and tactics required to efficiently manufacture goods or services. It include defining the resources needed, creating timetables, and establishing quality and output goals.
- Potential hazards and contingencies should also be considered in the plan. Production planning
 ensures that resources are used efficiently, expenses are kept to a minimum, and production targets
 are met.
- It also assists businesses in streamlining their processes, improving communication and collaboration, and adapting to changes in demand or market conditions.
- A well-designed production plan can assist firms in increasing their competitiveness, improving customer happiness, and achieving long-term success.

Ask ask

- Why is it important to have a clear plan in place before starting spice production?
- What are the key factors to consider when developing a production plan for spices?
- How do you determine the quantity of spices needed for a particular production run?
- What steps should be taken to ensure that the production process runs smoothly and efficiently?
- How can you adjust the production plan if unexpected challenges arise during the production process?
- What role does record-keeping play in the planning process for spice production?

Notes for Facilitation

- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

· Explain 🔤

- Introduction to Spice Processing Industry
- Obtaining instructions for spice production
- Good Manufacturing Practices to be followed for spice processing
- Resource management

- Elaborate

- Elucidate the key statistics with the help of (Fig 1.1.1 Key statistics for the spices sector), given in the Participant Handbook.
- Illustrate the obtaining instruction from supervisor with the help of (Fig 2.1.1. An effective way of obtaining instruction), given in the Participant Handbook.
- Explain the importance of process charts, product flow charts and formulation chart with the help of (Fig 2.1.2. Basic Flowchart, Fig. 2.1.3 Basic shapes of process flow chart), given in the Participant Handbook.

• Explain the preparation of ginger garlic powder with the help of (Fig 2.1.4 Preparation of Ginger Garlic powder), given in the Participant Handbook. (Teacher could use projector and video to clarify the topic)



Brief

• Each group must develop a list of raw material and manpower estimation

Activity Description

- Divide the class into two groups or more, depending on the total number of participants.
- One of the groups has to come up with the ways how to calculate the raw material and manpower estimation
- Give them enough time to come up with a list of formula's on how to calculate the raw material and manpower estimation
- Ask the groups to choose one representative to present the list to the board.

Debrief

- Summarize the activity by asking the class questions like
 - What did we do in this activity
 - What did we learn from this activity

Unit 2.2: Clean and maintain the work area, machinery & tool

Unit Objectives

At the end of the session, the participants will be able to:

- State cleaning and maintenance of work area, machines and tools per organisational standards.
- State waste management process.
- State techniques of tool, equipment and machinery inspection.

Resources to be Used

- Training kit (Trainer guide, Presentations),
- Whiteboard,
- Marker,
- Projector,
- Laptop,
- Presentation
- PowerPoint Presentation and software
- Flow chart
- Protective gloves, Head caps,
- Aprons, Safety goggles, Safety boots,
- Mouth masks, Sanitizer,
- Safety manual
- Participant Handbook

Do |

- Demonstrate proper cleaning and maintenance techniques for different types of machinery and tools, such as grinders, sifters, and mixers.
- Show how to properly store and organize spices and other ingredients in the work area.
- Explain the importance of following a regular cleaning and maintenance schedule to prevent contamination and ensure the safety of workers.
- Explain waste management with help of power point and live examples

Say Sa

- Cleanliness and maintenance of work area, machinery and tools are crucial in the spice processing industry to ensure quality and safety of the products produced.
- Regular cleaning and maintenance can prevent contamination, equipment failure, and injuries.
- Proper storage of tools and machinery also helps to extend their lifespan and reduce the need for repairs or replacements.

– Ask 🔤

- What are some of the most common instruments and machines used in spice processing, and how are they cleaned and maintained?
- Why is it critical to clean and preserve the spice processing industry's work environment, machinery, and tools?
- What are some of the potential risks associated with improperly cleaning and maintaining equipment in the spice processing industry?
- How can you keep your work area and equipment clean and in good operating order?

Notes for Facilitation

- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

Explain

- Cleaning and maintenance of the work area
- Cleaning and sanitisation of tools and equipment used in spice production
- Waste management
- Inspection procedures of tools, equipment and machinery

Elaborate



- Clarify why there is need for Sanitization and Cleaning of kitchen with the help of(Fig. 2.2.1 Maintaining kitchen hygiene), given in the Participant Handbook.
- Clarify the Effective Practices for Sanitization and Cleaning with the help of (Fig 2.2.2 Maintaining personal hygiene), given in the Participant Handbook.
- Clarify the difference between Sanitization and Cleaning with the help of (Fig 2.2.4 Cleaning V/s Sanitizing(Disinfecting), given in the Participant Handbook. (Use power point presentation to explain students in details)
- Explain the cleaning plan in the food industry (Fig. 2.2.5 Cleaning plan in a food processing industry), given in the Participant Handbook

- Activity

Brief

• Each group must develop food and non-food contact surfaces in a food processing unit.

Activity Description

- Divide the class into two groups or more, depending on the total number of participants.
- One of the groups has to come up with the food -contact surfaces in the work area. (You could give a hint like utensils)

- The other group has to come up with non-food contact surfaces in the work area. (You could give a hint like walls)
- Give them enough time to come up with a list.
- Ask the groups to choose one representative to present the list to the board.

Debrief

- Summarize the activity by asking the class questions like
 - What did we do in this activity
 - What did we learn from this activity

Unit 2.3: Organizing for spice production

Unit Objectives

At the end of the session, the participants will be able to:

- Explain how to organise tools and equipment used in spice production.
- Explain the process of receiving and organising production materials.
- Explain how to allocate work and responsibilities among team members.

Resources to be Used

- Training kit (Trainer guide, Presentations),
- Whiteboard,
- Marker,
- Projector,
- Laptop,
- Presentation
- PowerPoint Presentation and software
- Flow chart
- Process related documents,
- Grinder, Mills, Pulveriser,
- Sifter, Mortar & pestle,
- Pounding machine,
- De-stoner, Roaster,
- Dryer, Spice blender,
- Protective gloves, Head caps,
- Aprons, Safety goggles, Safety boots,
- Mouth masks, Sanitizer,
- Safety manual
- Participant Handbook

Do

- Initiate a discussion in the class by asking questions like "Why do you think it is necessary to clean the work area"
- "How can we clean the entire work area"
- Get responses from the participants.
- Drawing from their responses, explain how the work area can be divided into food-contact surfaces and non-food conduct surfaces.
- Conduct a group activity to let participants respond about the various food contact and non-food contact surfaces.
- Discuss the common types of cleaning agents used in the industry.

Say 🔓

- Cleanliness and maintenance of work area, machinery and tools are crucial in the spice processing industry to ensure quality and safety of the products produced.
- Regular cleaning and maintenance can prevent contamination, equipment failure, and injuries.
- Proper storage of tools and machinery also helps to extend their lifespan and reduce the need for repairs or replacements.

- Ask 💿

- What are the key steps involved in organizing for spice production?
- How do you ensure quality control in spice processing and production?
- What are the safety measures that should be taken during spice production?
- How do you manage and optimize inventory in a spice processing facility?
- What are some common challenges in spice production and how can they be addressed?
- How can technology and automation be integrated into spice processing and production?

- Notes for Facilitation

- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

Explain

- Organizing of tools and equipment
- Obtaining and organizing production material
- Assigning Tasks and Responsibilities

- Elaborate

• Define the Roles & Responsibilities of a team (Fig 2.3.4 Vertical storage of tools), given in the Participant Handbook.

- Activity

Brief

- Organizing for Spice Production. To teach students about the key steps involved in organizing for spice production, and how to ensure quality control, safety, and efficiency in the spice production process.
- Materials -PowerPoint presentation on Organizing for Spice Production , Sample Spice Production Facility Layout,
- Spice Processing Equipment and Machinery, Sanitation and Safety Equipment , Inventory Management Software, Spice Samples

Activity Description

- Begin by introducing the topic of Organizing for Spice Production and its importance in ensuring the quality, safety, and efficiency of spice production processes.
- Use a PowerPoint presentation to highlight the key steps involved in organizing for spice production, including facility design, equipment selection, inventory management, safety and sanitation protocols, and quality control measures.
- Discuss the different types of spice processing equipment and machinery that are commonly used in the spice industry, such as grinders, sifters, and blenders, and explain how each piece of equipment contributes to the production process.
- Provide a sample spice production facility layout and have students identify the different areas of the facility, such as the receiving area, processing area, storage area, and packaging area, and discuss how each area is used in the production process.
- Have students examine different spice samples and discuss the factors that contribute to spice quality, such as color, aroma, flavor, and texture.
- Explain how quality control measures are implemented in the production process to ensure that each spice meets the desired quality standards.
- Discuss the importance of safety and sanitation in the spice production process and provide examples of the types of safety equipment and protocols that are used to prevent accidents and contamination.
- Introduce the concept of inventory management and explain how software programs can be used to track inventory levels, monitor usage rates, and reorder supplies in a timely manner to ensure that production processes run smoothly.
- Divide students into small groups and have them design a layout for a spice production facility, select equipment and machinery, and develop a plan for quality control, safety, and inventory management.
- Have each group present their plan to the class, explaining how their design addresses the key steps involved in organizing for spice production and how it ensures quality, safety, and efficiency.
- Conclude the activity by discussing the challenges and opportunities in the spice industry and how students can pursue careers in spice production and related fields.

Debrief

- Summarize the activity by asking the class questions like
 - What did we do in this activity
 - What did we learn from this activity

Notes		
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3. Product Spice and Seasonings

- Unit 3.1: Basics of Spice Processing
- Unit 3.2: Process for Preparing Different Spices and Seasonings
- Unit 3.3: Packaging and Labelling of Various Spice Products
- Unit 3.4: Post-production Cleaning and Regular Maintenance of Equipment



Key Learning Outcomes

At the end of this module, you will be able to:

- Identify common spices
- Describe the basics of spice processing.
- Discuss the process for preparing different whole spices, seasonings, spice powder and curry powder.

Ö

- Demonstrate the standard work practices followed to produce whole spices, seasonings, spice powder and curry powder.
- Explain the procedure of wrapping and labelling products and post-production cleaning and maintenance of equipment.
- Demonstrate the technique to package the finished products.

Unit 3.1: Basics of Spice Processing

Unit Objectives

At the end of the session, the participants will be able to:

- Understanding the use and role of raw ingredients in the process of producing spice and seasonings
- Quality control during the spice manufacturing process
- FSSAI regulations to be followed for manufacturing of spice and seasonings

Resources to be Used

- Computer,
- Projection Equipment,
- PowerPoint Presentation and software,
- Facilitator's Guide,
- Participant's Handbook
- Grinder, mills,
- Pulverize,
- Sterilization chamber,
- Vacuum dryer chamber,
- Dryer,
- Roasting machine,
- Sifter, Mortar & Pestle,
- Pounding machine,
- De-stoner,
- Spice blender,
- PPEs
- Sanitizer,
- Safety manual

Do

- Show examples of common spices used in cooking and ask the students to identify them.
- Discuss the different parts of a spice plant and how they are used in processing.
- Have a demonstration on how to properly clean and dry spices before processing.
- Show different methods of processing spices such as grinding, roasting, or blending.

Say 5

- Spice processing involves the cleaning, grading, and grinding of spices to produce a high-quality end product.
- The process typically involves the removal of foreign matter, such as stones and dirt, as well as the separation of spices according to size and quality. Finally, the spices are ground to the desired texture and packaged for distribution.

- Ask ask
- What are the common methods used for cleaning and drying spices?
- How are spices graded based on quality?
- What are the different types of processing equipment used in the spice industry?
- How are spices stored and transported to prevent contamination and degradation?
- Can you explain the differences between whole spices, ground spices, and spice blends?

- Notes for Facilitation

- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

Explain

- Explain the Basics of Spice Processing?
- Illustrate the nature and deteriorative characteristics of Spices and Spice Products?
- Explain how spices losses their Aroma and Flavour?
- How is Colour Bleaching is done on spices?
- Explain Loss of Free-flowing nature?
- What is Microbial spoilage?
- What is Insect infestation?
- Explain Key Quality Control Points in Preparing Spices?
- How is Correct Harvesting Time determined?
- How is Cleaning, Drying, grading and grinding of spices is done?
- Explain FSSAI Regulations to be Followed for Manufacturing of Spice and Seasonings
- Explain Quality Assurance in Spice Processing

Elaborate

- Explain different types of spices with help of (Table 3.1.1 Major spice processing ingredients), given in the Participant Handbook. (Teacher can use projector to show students different types of spices)
- Explain Regulatory standards for Spices laid down by FSSAI with help of (Table 3.1.2 Regulatory standards for Spices laid down by FSSAI), given in the Participant Handbook.
- Explain how spices are selected with the help of (Table 3.1.3: Grading parameters for some spices and Table 3.1.4 Types of spices), given in the Participant Handbook.

Activity 5

Brief

• Conduct a tasting session where students can sample different spice blends and guess the ingredients used.

Activity Description

- Divide the class into two groups or more, depending on the total number of participants.
- Each group has been given a sample of different spice blends and has to guess the ingredients used.
- Group which guesses the most items right wins the game.

- Summarize the activity by asking the class questions like
 - What did we do in this activity
 - What did we learn from this activity

Unit 3.2: Process for Preparing Different Spices and Seasonings

Unit Objectives

At the end of the session, the participants will be able to:

• Discuss the spice manufacturing process for whole spices, curry powders and seasoning

Resources to be Used

- Computer,
- Projection Equipment,
- PowerPoint Presentation and software,
- Facilitator's Guide,
- Participant's Handbook
- Grinder, mills,
- Pulverize,
- Sterilization chamber,
- Vacuum dryer chamber,
- Dryer,
- Roasting machine,
- Sifter, Mortar & Pestle,
- Pounding machine,
- De-stoner,
- Spice blender,
- PPEs
- Sanitizer,
- Safety manual

Do

- Conduct a live demonstration of the process for preparing different spices and seasonings. This can help students to visualize and understand the process better.
- Provide students with an opportunity to practice the process on their own. This can help them to apply the knowledge and skills they have learned in a practical setting.
- Use visuals such as diagrams, pictures, and videos to explain the process for preparing different spices and seasonings. This can make the process more engaging and easy to understand.

Say 🔓

- Preparing different spices and seasonings involves a series of steps including selecting and cleaning raw materials, roasting, grinding, blending and packaging.
- The process varies depending on the type of spice and seasoning being prepared.
- Consistency and quality are crucial in the process to ensure customer satisfaction and safety. Proper labeling and storage are also important factors.

- Ask

- What are the common steps involved in the process of preparing spices and seasonings?
- What are some of the different methods used to dry spices and seasonings?
- How can you determine if a spice or seasoning is fresh and of good quality?
- Can you describe the difference between whole spices and ground spices?
- What are some common spice blends used in different cuisines, and how are they prepared?

Explain

- Whole Spices Manufacturing Process
- Inspection of the samples for desired parameters

Elaborate

- Explain how dry spices are converted to powder spices with help of (Fig 3.2.2 Flow chart for whole spices manufacturing), given in the Participant Handbook. (Teacher can use projector to show students different types of spices)
- Explain how to ensure specified moisture content in spices with help of (Table 3.2.1 Drying of whole spices), given in the Participant Handbook.
- Explain Curry Powder Manufacturing Process with the help of (Fig 3.2.5: Curry Powder Manufacturing Process), given in the Participant Handbook.
- Explain Seasoning Manufacturing Process with the help of (Fig 3.2.7: Seasoning Manufacturing Process), given in the Participant Handbook.
- Explain the basic Troubleshooting of Equipment during Production with the help of (Fig3.2.9 Troubleshooting steps), given in the Participant Handbook.
- Explain the Problems Occurring During Spice Processing and their Troubleshooting Process with the help of (Table 3.2.2 Defects Occurring in Spices and seasonings), given in the Participant Handbook.

Activity 🧏

Brief

• Conduct a tasting session where students can sample different spice blends and guess the ingredients used.

Activity Description

- Divide the class into two groups or more, depending on the total number of participants.
- Each group have given can sample different spice blends and guess the ingredients used.
- Group which guesses the most items right wins the game.

- Summarize the activity by asking the class questions like
 - What did we do in this activity
 - What did we learn from this activity

Unit 3.3: Packaging and Labelling of Various Spice Products

Unit Objectives

At the end of the session, the participants will be able to:

- Discuss the aspect of packaging spices and spice products.
- Explain methods of packaging spices and materials used for packaging?
- Explain FSSAI standards applicable for the labelling of spice products?

Resources to be Used



- Computer,
- Projection Equipment,
- PowerPoint Presentation and software,
- Facilitator's Guide,
- Participant's Handbook
- Packaging machine,
- Labels,
- Packaging material,
- PPEs
- Sanitizer,
- Safety manual

Do

- Demonstrate different types of packaging materials suitable for different spices and their shelf-life.
- Explain the importance of proper labeling of spice products, including regulatory requirements, nutritional information, and ingredient declarations.
- Showcase examples of effective labeling design and branding that can help distinguish products from competitors.
- Conduct a group exercise where students can create and design their spice packaging and labeling, taking into account branding, nutrition information, and regulatory requirements.

- Say 뎗

- Packaging and labelling of spice products are essential for their marketability and safety. Proper packaging preserves the quality of spices and protects them from environmental factors.
- Labelling provides information about the product, including its ingredients, manufacturing date, expiry date, and nutritional value. It is essential to comply with regulatory requirements while packaging and labelling spice products.

- Ask

- What are the regulatory requirements for packaging and labeling of spice products?
- What are the common types of packaging materials used for spice products?
- What information should be included on the label of a spice product?
- How can packaging and labeling impact the shelf life and quality of a spice product?
- What are some examples of innovative packaging solutions used in the spice industry?

- Notes for Facilitation

- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

Explain

- Aspects of Packaging Spices and Spice Products
- Various factors affecting the packaging of spices
- Methods of Packaging Spices and Packaging Material
- Packaging of Pastes and Dry Spice Blends
- Labelling Requirement
- Record information on finished products
- Need for Record-keeping

Activity §

Brief

• Conduct a mock activity of Packaging and Labelling of Various Spice Products

Activity Description

- Divide the class into groups and assign each group a different spice product (such as chili powder, cumin powder, or cinnamon sticks).
- Have each group research the packaging and labeling requirements for their assigned spice product. This can include requirements for container size, material, labeling information, and legal requirements.
- Once the groups have completed their research, have them create a mock-up of the packaging and labeling for their spice product. They can use materials such as paper, markers, and stickers to create the labels and packaging.
- Each group will then present their mock-up to the class, explaining their choices for packaging and labeling and how they meet the requirements for their assigned spice product.
- As a class, discuss the importance of packaging and labeling in the spice processing industry, including how it affects consumer perception and safety.

- Summarize the activity by asking the class questions like
 - What did we do in this activity
 - What did we learn from this activity

Unit 3.4: Post-production Cleaning and Regular Maintenance of Equipment

Unit Objectives



At the end of the session, the participants will be able to:

- Understand the importance of cleaning and maintenance of equipment
- Explain methods of post-production cleaning such as CIP & COP.
- Explain the basic troubleshooting techniques of production machinery.

Resources to be Used

- Computer,
- Projection Equipment,
- PowerPoint Presentation and software,
- Facilitator's Guide,
- Participant's Handbook
- Grinder, mills,
- Pulverize,
- Sterilization chamber,
- Vacuum dryer chamber,
- Dryer,
- Roasting machine,
- Sifter, Mortar & Pestle,
- Pounding machine,
- De-stoner,
- Spice blender,
- PPEs
- Sanitizer,
- Safety manual

Do

- Demonstrate the proper cleaning and maintenance procedures of equipment used in the spice processing industry.
- Provide a checklist of cleaning and maintenance tasks for students to complete on different equipment.
- Divide students into small groups and ask them to create a cleaning and maintenance schedule for a specific equipment.
- Organize a practical session where students can clean and maintain the equipment themselves, under supervision.
- Discuss the importance of post-production cleaning and maintenance and its impact on the quality of the product and equipment longevity.

- Say 🔓

- Post-production cleaning and regular maintenance of equipment is crucial to ensure hygiene, safety, and longevity of equipment in the spice processing industry.
- Regular cleaning removes leftover spices, dust, and debris that can contaminate the next batch, while maintenance prevents wear and tear and reduces the likelihood of breakdowns.
- It is essential to follow the manufacturer's guidelines for cleaning and maintenance and keep a record of maintenance to ensure equipment longevity.

Ask 🤄

- What are the benefits of post-production cleaning and regular maintenance of equipment in the spice processing industry?
- What are the common equipment used in the spice processing industry that require regular maintenance?
- How often should equipment be cleaned and maintained in the spice processing industry?
- What are the best practices for post-production cleaning and maintenance of equipment in the spice processing industry?
- What are the consequences of neglecting post-production cleaning and regular maintenance of equipment in the spice processing industry?

Notes for Facilitation



Explain the correct answers one by one

Explain |

- Cleaning of Equipment
- Importance Reporting equipment faults

Elaborate

• Explain various types of maintenance with the help of (Table 3.4.1 Types of Maintenance), given in the Participant Handbook. (Use projector to show them a video on the given topic for better understanding)

- Activity

Brief

- To develop an equipment maintenance plan for a spice processing facility.
- Materials Needed: Paper, pencils, equipment manuals and maintenance schedules (if available)

Activity Description

- Divide the class into small groups.
- Assign each group a different piece of equipment commonly used in the spice processing industry, such as a grinder, mixer, or conveyor belt.
- Provide each group with the manual and maintenance schedule for their assigned equipment.
- Instruct each group to review the manual and schedule, and to develop a maintenance plan for their assigned equipment. The plan should include:
 - A list of all necessary maintenance tasks and how frequently they should be performed
 - A schedule for when each task will be completed
 - \circ ~ The name of the person responsible for each task ~
 - Any tools or supplies that will be needed for each task
- Once the groups have completed their plans, have each group present their plan to the class. Encourage the other groups to ask questions and provide feedback.
- Discuss the importance of post-production cleaning and regular maintenance of equipment in the spice processing industry, and how a well-maintained equipment can reduce downtime and ensure product quality and safety.
- Encourage the students to think about how they can apply the principles of equipment maintenance in their own work, whether in a spice processing facility or in other industries.

Debrief

 This activity will help students understand the importance of post-production cleaning and maintenance of equipment in the spice processing industry and the significance of complying with the industry standards.

Notes 📋			











4. Ensuring Food Safety & Personal Hygiene

- Unit 4.1 Introduction to Food Safety
- Unit 4.2 Schedule IV requirements of FSSAI
- Unit 4.3 Personal Hygiene
- Unit 4.4 Health Safety



Key Learning Outcomes

At the end of this module, you will be able to:

- Identify the hazards, types of hazards (Physical, chemical, biological and Allergenic) and risks at workplace
- HACCP, TACCP, VACCP, Control measures, CCP, Critical limit
- Explain the preventions of product contamination
- Discuss the factors affecting food spoilage and food storage techniques
- Describe Schedule IV requirements of FSSAI
- Discuss cleaning and sanitization process, needs and importance and storage of sanitizing materials
- Discuss health and safety policies and procedures
- Discuss Employee health do's and don'ts, Food borne illness and preventive health check-ups

Unit 4.1 - Introduction to Food Safety

- Unit Objectives

At the end of the session, the participants will be able to:

Identify types of hazards and risks at workplace

Resources to be Used

- Training kit (Trainer guide, Presentations),
- Whiteboard,
- Marker,
- MS PowerPoints
- Projector,
- Laptop, Gloves,
- Hair net,
- Shoe cover,
- Soap dispenser,
- Hand sanitizer,
- Ear plugs,
- Masks,
- Aprons/lab coats eye protection,
- Hard hats,
- Gloves, rubber boots,
- Presentation
- Participant Handbook

Do 🗸

- Start with a brief overview of food safety and its importance in the food industry.
- Discuss common foodborne illnesses and their causes.
- Review the basic principles of food safety, such as proper hand washing, cleaning and sanitizing equipment, and temperature control.
- Demonstrate how to properly handle and store food to prevent contamination.
- Use case studies or real-life examples to illustrate the consequences of poor food safety practices.

Say 뎗

 Food safety refers to the policies and procedures in place to assure the quality and safety of food items from farm to fork. It includes a variety of activities such as food harvesting, processing, packaging, transportation, storage, and preparation to reduce the danger of contamination and spoiling, which can result in foodborne illnesses.

- Food safety is critical for preserving public health, maintaining customer confidence, and ensuring the safety and quality of the food supply. To design and implement food safety norms and guidelines, various regulatory agencies and standards exist. The Food and Drug Administration (FDA), the World Health Organization (WHO), and the International Food Safety Authorities Network (INFOSAN) are among these organizations.
- Ask ask
 - What is the definition of food safety, and why is it important?
 - What are some common causes of foodborne illness, and how can they be prevented?
 - What are the four steps in the food safety chain, and how do they relate to each other?
 - How can you ensure that food is handled and stored safely in your workplace?
 - What are some examples of food safety hazards that can occur during food preparation, and how can they be controlled?

Notes for Facilitation



- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

– Explain 🔤

- Food safety
- Food safety hazard and risk
- Types of hazards
- What Are the Signs & Symptoms of a Food Allergy?
- Contamination, Cross Contamination and Prevention
- Importance of Storing Food at Specified Temperature
- Proper Transportation of food
- HACCP, TACCP, VACCP, Control Measures, Critical Control Point, Critical Limit

Elaborate

- Explain about microbiological hazard with the help of (Fig. 4.1.1: Microbiological Hazards), given in the Participant Handbook. (Use projector to show them a video on the given topic for better understanding)
- Describe the food safety with the help of (Fig. 4.1.3: FATTOM Food Safety), given in the Participant Handbook. (Use power point to explain topic in detail)

Activity 🞉

Brief

• Each group must develop a list of reason why it is important to have proper storage in food safety

Activity Description

- Divide the class into two groups or more, depending on the total number of participants.
- One of the groups has to come up with a list of the role of proper storage in food safety..
- Ask the groups to choose one representative to present the list to the board and explain it to whole class.

- Summarize the activity by asking the class questions like
 - What did we do in this activity
 - What did we learn from this activity

Unit 4.2: Schedule IV Requirements of FSSAI

- Unit Objectives

At the end of the session, the participants will be able to:

Identify requirements in Schedule IV in FSSAI

Resources to be Used

- Training kit (Trainer guide, Presentations),
- Whiteboard,
- Marker,
- Projector,
- Laptop,
- Flow charts
- PPEs,
- Sanitizers
- Handwash
- Presentation
- Participant Handbook

Do 🗸

- Introduce the learners to the different categories of food additives and the permissible limits for their use in various food products.
- Discuss the labelling requirements for packaged food products as per the FSSAI guidelines.
- Explain the permissible limits for contaminants like heavy metals, pesticides, and mycotoxins in various food products.
- Emphasize the importance of maintaining proper hygiene and sanitation practices in food processing and handling.
- Conduct a group activity to analyze and interpret the Schedule IV requirements and their implications for the food industry.

Say Sa

• A technician is in charge of carrying out technical duties relating to the setup, upkeep, and repair of machinery, systems, and other equipment. They must be very knowledgeable about the technology they use, be able to solve problems, and adhere to safety procedures.



- What is Schedule IV of FSSAI?
- What are the requirements mentioned in Schedule IV?

- Why is it important to comply with the requirements of Schedule IV?
- What are the consequences of non-compliance with Schedule IV?
- How can businesses ensure compliance with Schedule IV of FSSAI?

Notes	for	Facil	litati	on
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- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

Explain

- Schedule IV Requirements of FSSAI
- Food Processing / Preparation, Packaging and Distribution / Service
- Where and How to Store Your Cleaning Supplies

Elaborate

- Elucidate the parts of GMP and GHP with the help of (Table 1.2.1: Five Parts of Good Manufacturing Practices (GMP) and Good Hygiene Practices (GHP)), given in the Participant Handbook.
- Describe the different workplace ethics factors of layout and design with the help of (Fig. 4.2.2: Layout and Design factors), given in the Participant Handbook.

Activity 😥

Brief

• Each group must develop a list of various parts of Good Hygiene Practices

Activity Description

- Divide the class into two groups or more, depending on the total number of participants.
- One of the groups has to come up with the ways to explain parts of good hygiene practices team member which other team member has made with help of an act
- Ask the groups to choose one representative to present the list to the board.

- Summarize the activity by asking the class questions like
 - What did we do in this activity
 - What did we learn from this activity

Unit 4.3: Personal Hygiene

- Unit Objectives

At the end of the session, the participants will be able to:

Identify types of health and safety policies and procedures

Resources to be Used

- Training kit (Trainer guide, Presentations),
- Whiteboard,
- Marker,
- MS PowerPoints
- Projector,
- Laptop, Gloves,
- Hair net,
- Shoe cover,
- Soap dispenser,
- Hand sanitizer,
- Ear plugs,
- Masks,
- Aprons/lab coats eye protection,
- Hard hats,
- Gloves, rubber boots,
- Presentation
- Participant Handbook

Do

- Initiate a discussion in the class by asking questions like "Why do you think it is necessary to personal hygiene"
- Get responses from the participants.
- Drawing from their responses, explain how the personal hygiene help in maintaining a good health
- Show them how hand is washed properly

Say 🔓

- Personal hygiene is the term used to describe the routines and actions people take to keep themselves clean and support good health. It involves chores like taking a shower or a bath, brushing your teeth, cleaning your hands, and maintaining your hair and nails.
- Personal hygiene is crucial because it lowers the risk of illnesses and diseases, stops the transmission of germs and bacteria, and enhances general health and wellbeing.
- Personal hygiene is important in both social and professional contexts since it is frequently seen as a measure of a person's moral character and level of regard for others.

• People can encourage excellent health and preserve a positive self-image by incorporating appropriate personal hygiene practises into everyday routines.

Ask ask

- What comes under personal hygiene?
- State the Importance of hygiene for food processing technician?
- What precaution do their mother take while cooking food for them at home?
- What type of sanitizer are most effective for sanitizing hands?

Notes for Facilitation

- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

Explain

- What is Personal hygiene
- How personal hygiene is maintained ?
- Importance of washing hands and when and how hands should be washed ?

Elaborate

- Elucidate the personal hygiene with the help of (Fig.4.3.2: Personal hygiene), given in the Participant Handbook.
- Describe the Proper hand washing for any food safety system with the help of (Fig. 4.3.3: Methods of washing hand), given in the Participant Handbook. (Manually show them proper way washing hands)
- Elucidate how to Use Sanitizer with the help of (Fig 4.3.4 : Usage of Sanitizer), given in the Participant Handbook. (Either use projector or practically show them how to use sanitizer)
- Illustrate when to Wash and Sanitize Hand with the help of (Fig. 4.3.5: Times to wash and sanitize hand), given in the Participant Handbook

- Activity 💡

Brief

 Conduct a role-playing exercise where students act out scenarios related to personal hygiene in a food processing plant.

Activity Description

- Divide the class into two groups or more, depending on the total number of participants.
- Each group given a different scenario to act out. For example, a scenario can involve a worker forgetting to wash their hands before handling food, or a worker failing to wear appropriate

personal protective equipment such as gloves and hairnets.

- After the groups have completed their role-playing exercise, they can discuss the scenario and identify what went wrong and how it could have been prevented.
- This activity help students understand the importance of personal hygiene in the food processing industry and the impact of improper hygiene on food safety and quality.

- Summarize the activity by asking the class questions like
 - What did we do in this activity
 - What did we learn from this activity

Unit 4.4: Health Safety

Unit Objectives

At the end of the session, the participants will be able to:

- Illustrate the concept of health safety
- Understand the hazards of health safety
- Explain the health and safety policies and procedures
- Describe the personal protective equipment
- Discuss the types of personal protective equipment

Resources to be Used



- Whiteboard,
- Marker,
- Projector,
- Laptop,
- Hair net,
- Shoe cover,
- Soap dispenser,
- Hand sanitizer,
- Ear plugs,
- Masks,
- Aprons/lab coats eye protection,
- Hard hats,
- Gloves, rubber boots,
- Presentation
- Participant Handbook

Do

- Conduct a hazard identification and risk assessment exercise with your students and discuss how to mitigate risks associated with the identified hazards.
- Demonstrate how to use personal protective equipment (PPE) and discuss the importance of wearing PPE in the workplace.
- Discuss the different types of emergency situations that may arise in the workplace and how to respond to them.

Say 뎙

 Health safety refers to the precautions taken to guarantee individuals' physical and mental wellbeing in a variety of situations, such as workplaces, schools, and public areas.

- It entails recognizing and assessing potential health risks, putting appropriate preventative measures in place, and responding quickly to emergencies. Proper hygiene, vaccination, the use of personal protective equipment, regular health exams, and disaster readiness planning are all examples of health safety practices.
- Health safety is critical for creating a healthy environment and preventing illness spread. It is a shared responsibility that necessitates the collaboration of individuals, organizations, and governments to ensure everyone's well-being.
- Ask
 - Why is it important to prioritize health and safety in the workplace?
 - What are some common hazards in the spice processing industry, and how can they be mitigated?
 - How can employees be trained to identify and report potential health and safety hazards?
 - What steps should be taken in the event of an accident or injury in the workplace?
 - How can health and safety policies be communicated effectively to all employees?
 - What are some best practices for maintaining a clean and safe work environment?

– Notes for Facilitation

- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

Explain

- Health and Safety
- Health Safety Hazard
- Health and Safety Policies and Procedures
- What is Personal Protective Equipment?
- Different Types of PPE
- Importance of Preventive Health Check-up's

- Elaborate



- Explain how food handler work with the help of (Fig. 4.4.5: FSSAI dos and don'ts for food handlers), given in the Participant Handbook.
- Explain more about health check up with the help of (Fig. 1.4.6: Format for health checkup), given in the Participant Handbook.

Activity

Brief

• Conduct a mock safety inspection of a food processing plant.

Activity Description

- Divide the class into two groups or more, depending on the total number of participants.
- Each group assigned a different area of the plant to inspect for compliance with safety regulations and best practices.
- Students can then conduct a thorough inspection of the area, identify any safety hazards or potential violations, and document their findings in a safety report.
- After the groups have completed their safety inspection, they can present their findings to the class and discuss strategies for addressing the identified safety hazards and preventing future safety violations.

- Summarize the activity by asking the class questions like
 - What did we do in this activity
 - What did we learn from this activity

Notes 🗐 ————	
- Notes 📋	









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5. Managing Accidents and Emergencies

Unit 5.1 Hazard, Risk and Accidents

Unit 5.2 Standard Practices and Precautions

Unit 5.3 Uses of Electrical Equipment

Unit 5.4 Usage of Personal Protective Equipment

Unit 5.5 Organisational Protocols

Unit 5.6 Dealing with Toxics

Unit 5.7 Fire Prevention and Fire Extinguishers

Unit 5.8 Artificial Respiration and CPR

Unit 5.9 Rescue and Evacuation In Case Of Fire

Unit 5.10 First Aid

Unit 5.11 Potential Injuries and Ill Health

Unit 5.12 Precautions in Mobility

Unit 5.13 Significance of various types of hazard and safety signs



Key Learning Outcomes

At the end of this module, you will be able to:

- Recognize the types of hazards, risks as well as accidents
- Categorize the standard precautions and practices
- Examine the utilization of the electrical equipment
- Explore the usage of personal protective equipment
- Recognize the organizational protocols
- Monitor the ways to handle the toxics
- Identify fire prevention and fire extinguisher
- Evaluate CPR as well as the artificial respiration
- Discuss the evacuation and rescue
- Catalogue the first aids
- Understand the ill health as well as potential injuries
- Demonstrate the precautions in mobility
- Discuss the significance of various types of hazard and safety signs

Unit 5.1 - Hazard, Risk and Accidents

- Unit Objectives

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At the end of the session, the participants will be able to:

• Identify the types of hazards, risks as well as accidents

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide

Do

- Explain the types of hazards, risks as well as accidents.
- Discuss the Hazard Identification and risk assessment

- Say 🔓

- There are different types of hazards
 - Safety hazard
 - Chemical hazards
 - Biological hazards
 - Physical hazard
 - Ergonomic hazard
 - Work organization hazards

Ask ask

- Workplace hazards
- What do you mean by risk assessment?

- Notes for Facilitation

- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

— Explain 占

What are workplace hazards?

Elaborate

• Elucidate the Sources of different types of hazards with the help of (figure 5.1.2), given in the participant handbook

Activity

Brief

• Each group must develop a list of workplace hazards.

Activity Description

- Group the students into a group of three.
- List down the workplace hazards

Debrief

• Request the class questions like, "What did we do in this activity?" to summarise the experience. What did this activity teach us?

Unit 5.2 - Standard Practices and Precautions

- Unit Objectives

|

At the end of the session, the participants will be able to:

• Categorize the standard precautions and practices

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide

Do

• Describe the standard practices and precautions in managing Risks and accidents.

– Say 🔓

- There are certain ways in standard precautions and practices:
 - Hand hygiene
 - Usage of personal protective equipment
 - Respiratory hygiene/ Cough Etiquette
 - Sharp Safety
 - Safe injection practices
 - Sterile instruments and devices
 - Avoiding ergonomic hazard



What do you mean by standard precautions and practices ?

Notes for Facilitation

- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

— Explain 🔤

• Standard precautions and practices

Elaborate

Describe the standard precautions and practices

Activity

Brief

• Conduct mock bakery safety inspection.

Activity Description

- Divide the group into teams of three or four people, with each team being responsible for inspecting a different area of the bakery (e.g., the mixing and prep area, the oven area, the packaging area, etc.).
- Provide each team with a checklist of safety standards and precautions that they need to look for during the inspection. This could include things like proper use of personal protective equipment (PPE), correct storage of ingredients and equipment, appropriate handling of raw materials, and effective cleaning and sanitation practices.
- Allow each team a set amount of time (e.g., 30 minutes) to conduct their inspection and take notes on any issues they observe.
- Once the inspection is complete, have each team present their findings to the rest of the group. This could involve highlighting areas of concern, identifying good practices that they observed, and making recommendations for improvement.
- As a group, discuss the findings and work together to develop an action plan for addressing any
 issues that were identified. This could involve assigning specific tasks to team members, setting
 deadlines for implementation, and discussing ways to monitor progress and maintain ongoing
 safety standards.

Debrief

• Request the class questions like, "What did we do in this activity?" to summarise the experience. What did this activity teach us?

Unit 5.3 - Uses of Electrical Equipment

Unit Objectives

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At the end of the session, the participants will be able to:

• Examine the utilization of the electrical equipment

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide

Do

• Discuss the utilization of the electrical equipment.

– Say 🔓

• There are different types of electrical equipment

— Ask as

• What do you mean by electrical equipment?

- Notes for Facilitation

- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

– Explain

What is the utilization of the electrical equipment?

- Elaborate

- Elucidate the different types of electrical equipment with the help of (figure 5.3.1), given in the participant handbook.
- Elucidate the electrical hazard symbols with the help of (figure 5.3.2), given in the participant handbook.



Brief

• Each group must develop a list of types of electrical equipment used in food processing plant.

Activity Description

- Group the students into a group of four.
- List down the different types of electrical equipment.

Debrief

• To summarise the event, pose questions to the class like, "What did we do in this activity?" What lesson did this exercise give us?

Unit 5.4 - Usage of Personal Protective Equipment

– Unit Objectives

At the end of the session, the participants will be able to:

• Explore the usage of personal protective equipment

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide
- Hairnets or hats
- Aprons or smocks
- Disposable or reusable gloves
- Safety glasses or goggles
- Slip-resistant shoes

Do

- Discuss the usage of personal protective equipment.
- Tell them about the importance of PPE in food industry.

- Say 뎗

- Personal Protective Equipment is any device or clothing worn by a worker to control the level of risk that when the worker when exposed to:
 - Dangerous goods, hazardous chemicals, infectious substances
 - Dust, fumes or particles
 - Radiation (ionizing and non-ionizing), ultraviolet or solar radiation
 - Noise
 - Moving objects such as vehicles, trolleys and forklifts
 - Flying objects when using machinery with moving parts
 - Environmental factors, for example, high and low temperature

Ask ask

Personal protective equipment?

Notes for Facilitation

- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

Explain

• What is the use of Personal protective equipment?



• Elucidate the usage of Personal protective equipment with the help of (figure 5.4.1), given in the participant handbook

Activity 🔅

Brief

• Each group must demonstrate the use of various types of personal protective equipment.

Activity Description

- Group the students into a group of four.
- Demonstrate the use of PPE (Personal Protective Equipment) in various circumstances .

Debrief

• To summarise the event, pose questions to the class like, "What did we do in this activity?" What lesson did this exercise give us?
Unit 5.5 - Organisational Protocols



At the end of the session, the participants will be able to:

() ()

Recognizing the organizational protocols

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide

– Do 📐

• Recall the organizational protocols.

– Say 🕼

• Explain the organizational protocols

- Ask 💿

• What do you mean by organizational protocols?

Notes for Facilitation

- Allow maximum participation to answer the questions.
- Explain the correct answers one by one



• List the different ways to organizational protocols.

- Elaborate

• Discuss the organizational protocols



Brief

• Each group must develop a list of organizational protocols.

Activity Description

- Group the students into a group of four.
- Organizational protocols.

Debrief

Unit 5.6 - Dealing with Toxics



At the end of the session, the participants will be able to:

• Monitor the ways to handle the toxics

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide

– Do 📐

• Explain the ways to handle the toxics.

- Say ᡗ

• There are various ways to handle the toxins.

Ask ask

- What is the Storage requirement?
- What do you mean by Labelling requirement?
- What is the Spill and accident procedures?
- What do you mean by Waste management?

Notes for Facilitation



- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

- Explain 🛛

• Explain the Waste disposal process for a different type of waste

- Elaborate

• Elucidate the Waste disposal process for a different type of waste with the help of (figure 5.6.1), given in the Participant Handbook.



Brief

• Each group must develop a list of various ways to handle the toxics.

Activity Description

- Group the students into a group of four.
- List the different ways to handle the toxics.
- List the different types of waste.

Debrief

Unit 5.7 - Fire Prevention and Fire Extinguishers

- Unit Objectives

At the end of the session, the participants will be able to:

• Identify fire prevention and fire extinguishers

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide

- Do 📐

- Describe the fire prevention and fire extinguisher.
- Explain the uses of fire extinguisher

Say 뎗

- A fire extinguisher is an active instrument that helps control small emergency fires. It can't be used for the huge fire which is out of control. Such fires are controlled with the help of a fire brigade.
- It is very important to safely vacate the persons from a building set on fire in the minimum amount of me from the safest path. This path needs to be the shortest possible and easily passable. It should be in proper condition so that it can be used in an emergency to evacuate the entrapped person in a building.

- Ask

- What is the fire prevention and fire extinguisher?
- Different types of fire extinguisher.

— Notes for Facilitation

- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

- Explain 😽

- What do you mean by fire extinguisher.
- How many types of fire extinguishers are there?

- Explain the types of fire extinguisher with the help of (figure 5.7.1), given in the Participant Handbook.
- Elucidate the Pass technique for fire extinguisher with the help of (figure 5.7.2), given in the Participant Handbook.

Activity 😥

Brief

• Each group must develop a list of uses of fire extinguisher.

Activity Description

- Group the students into a group of four.
- List the categories of different types of fire evacuation.
- Now categories them into which extinguisher can be used at what level of fire

Debrief

Unit 5.8 - Artificial Respiration and CPR



At the end of the session, the participants will be able to:

• Evaluate CPR as well as the artificial respiration

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide

- Do 📐

- Describe the Evaluate CPR as well as the artificial respiration.
- Explain artificial respiration and CPR.

- Say 🔓

- There are the two types of ways to provide artificial respiration.
 - Manual
 - Mechanical

- Ask

- What is the artificial respiration?
- What is CPR?

Notes for Facilitation



- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

— Explain 😽

• What do you mean by artificial respiration.

- Elaborate

- Elucidate the CPR steps with the help of (table 5.8.1), given in the Participant Handbook.
- Elucidate the back pressure Aam-lift with the help of (Fig 5.8.1), given in the Participant Handbook.

- Elucidate the big valve mask with the help of (Fig 5.8.2), given in the Participant Handbook.
- Elucidate the Ventilator with the help of (Fig 5.8.3), given in the Participant Handbook.

Activity

Brief

• Each group must develop a list of different types of fire evacuation.

Activity Description

- Group the students into a group of four.
- List the categories of different types of fire evacuation.

Debrief

Unit 5.9 - Rescue and Evacuation In Case Of Fire

- Unit Objectives

At the end of the session, the participants will be able to:

• Discuss the evacuation and rescue during a fire incident

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide



Discuss the evacuation and rescue during a fire incident.

– Say 뎙

• "Fire Emergency Evacuation Plan (FEEP)" stands a scripted document that involves the activity to be adapted by all staff in the event of a fire and the sequences for calling the fire brigade.



• Explain the evacuation and rescue during a fire incident

– Notes for Facilitation

- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

— Explain 🏻

• How many types of fire evacuation are there.

Elaborate

- Elucidate the staff fire notice with the help of (Fig 5.9.1), given in the Participant Handbook.
- Elucidate the fire evacuation process with the help of (Fig 5.9.2), given in the Participant Handbook.



Brief

• Each group must demonstrate with the help of a drill the evacuation procedure in case of fire.

Activity Description

- Group the students into a group of four.
- Conduct a drill to show the process of fire evacuation.

Debrief





Brief

• Each group must develop a list of how to do bandaging

Activity Description

- Group the students into a group of four.
- Could you elaborate on how we can do bandaging?

Debrief

Unit 5.11 - Potential Injuries and III Health

(J)

- Unit Objectives

At the end of the session, the participants will be able to:

• Understanding the ill health as well as potential injuries

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide

– Do 📐

• Discuss the ill health as well as potential injuries.

Say 🔓

- A few common work-related injuries and illnesses.
 - Slips, trips and falls
 - Muscle strains
 - Being hit by falling objects
 - Cuts and lacerations
 - Inhaling toxic fumes
 - Crashes and collisions
 - Exposure to loud noise
 - Fights at work



What do you mean ill health as well as potential injuries in workplace?

- Notes for Facilitation

- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

Explain 🖷

Explain the ill health as well as potential injuries.

• Ensure about the health as well as potential injuries

Activity	E.
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Brief

• Demonstrate how to check the ill health as well as potential injuries .

Activity Description

- Group the students into twos
- Describe the ill health as well as potential injuries.

Debrief

Unit 5.12 - Precautions in Mobility

- Unit Objectives

At the end of the session, the participants will be able to:

• Demonstration of the precautions in mobility

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide

– Do 📐

• Describe the precautions in mobility.

Say 🔓

- Precautions at the workplace may include.
 - Keep every corner organised, clean and clutter-free
 - Usage of mats on slippery floors
 - Properly stored combustible material
 - Use appropriate PPE such as safety glasses, gloves, hard hats, and respiratory protection. Ensure that PPE is properly fitted, maintained, and used correctly.
 - Regularly inspect and maintain equipment to ensure it is in good working condition. Replace any damaged or worn-out parts immediately.
 - Identify and control hazards in the workplace, such as slip and trip hazards, dangerous chemicals, and electrical hazards. Implement safety procedures and equipment to minimize risks.
 - Encourage employees to report any safety concerns or incidents, including near-misses. Investigate and address all reports promptly.
 - Provide emergency preparedness

The most important to have medical facilities and proper first aid for the employees working with heavy equipment and machinery at the workplace.

Ask

What do you mean precautions in mobility?

Notes for Facilitation

- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

- Explain 🗄

• What are precautions in mobility?

Elaborate

• Discuss the precautions in mobility



Brief

• Each group must develop a list of precautions in mobility in workplace.

Activity Description

- Group the students into twos
- Discuss the precautions in mobility.

Debrief

Unit 5.13 - Significance of various types of hazard and safety signs

- Unit Objectives

At the end of the session, the participants will be able to:

• Understanding the impact of various types of hazard and safety signs

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide

– Do 📐

• Discuss the impact of various types of hazard and safety signs.

- Say | ົ

- There are various types of safety signs.
 - Biological hazards symbol
 - Chemical hazards symbol
 - Safety hazards symbol
 - Ergonomic hazard symptoms
 - Work Organization hazard symbol
- Safety hazards are the most common workplace risks

Ask ask

- What do you mean safety signs?
- Difference types of safety signs?

- Notes for Facilitation

- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

- Explain 占

- What are organizational policies.
- Different types of safety signs.

- Elucidate the role of hazard in risk assessment with the help of (Table 5.13.1), given in the Participant Handbook.
- Elucidate the chemical hazard safety signs with the help of (Table 5.13.2), given in the Participant Handbook.
- Elucidate the biological hazard safety signs with the help of (Table 5.13.3), given in the Participant Handbook.
- Elucidate the Work organization related hazard safety signs with the help of (Table 5.13.4), given in the Participant Handbook.

Activity

Brief

• Each group must develop a list of various types of hazard and Safety Signs in workplace.

Activity Description

- Group the students into twos
- Discuss the safety hazards symbol.
- Describe the biological hazard significance.
- Discuss the Work Organization hazard symbol.
- Discuss the ergonomic hazard symptoms.

Debrief

— Notes [
	 	 ······	











6. Work Effectively in an Organisation

Unit 6.1 Organizational Policies

Unit 6.2 Legislations, standard, policies, and procedures

Unit 6.3 Reporting Structure

Unit 6.4 Inter-Dependent Functions

Unit 6.5 Harassment and Discrimination

Unit 6.6 Prioritising Tasks

Unit 6.7 Communication Skills

Unit 6.8 Teamwork

Unit 6.9 Ethics and Discipline

Unit 6.10 Grievances Solution

Unit 6.11 Interpersonal Conflicts

Unit 6.12 Disabilities and Challenges

Unit 6.13 Gender Sensitivity and Discrimination

Unit 6.14 Applicable Legislation, Grievance Redressal Mechanisms

Unit 6.15 Transacting With Others without Personal Bias





Key Learning Outcomes

At the end of this module, you will be able to:

- Categorize the organizational policies
- Catalogue the Legislations, standards, policies, and procedures
- Analyse the reporting structure
- List the inter-dependent functions
- Discuss the impact of harassment and discrimination
- Monitor the ways of prioritising the task
- Record the types of communication skills
- Evaluate the ways of carrying out teamwork
- Highlight the ethics and discipline
- Illustration of the grievance's solution
- Recognize the interpersonal conflicts
- Identify the disabilities and challenges
- Outline the gender sensitivity and discrimination
- Discuss the applicable legislations, grievance redressal mechanisms
- Analyse the process of transacting with others without personal bias

Unit 6.1 - Organizational Policies



At the end of the session, the participants will be able to:

• Categorize the organizational policies

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide

– Do 📐

• Tell about the organizational policies.

Say 🔓

- There are different types of organizational policies at workplace.
 - Workplace health and safety policy
 - Non-discrimination and anti- harassment policies
 - Equal opportunity policy
 - Employee code of conduct policy
 - Leave policy
 - Employee time-stamping policy
 - Employee disciplinary and termination policy
 - E-mail policy
 - Social media policy
 - Mobile phone policy
 - Temporary policy

– Ask 🔤

- What do you mean organizational policies?
- Difference types of organizational policies?

Notes for Facilitation

- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

- Explain 🗟

- What are organizational policies.
- Different types of organizational policies.

Elaborate

e 🗇

• Discuss the organizational policies and types of organizational policies at the workplace.

· Activity

Brief

• Each group must develop a list of difference types of organizational policies in the workplace.

Activity Description

- Group the students into twos
- Different types of organizational policies in the workplace.
- Describe the organizational policies.

Debrief

Unit 6.2 - Legislations, standard, policies, and procedures

- Unit Objectives

At the end of the session, the participants will be able to:

• Catalogue the Legislations, standards, policies, and procedures

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide

– Do 📐

• Describe the Legislations, Standards, Policies, and Procedures.

– Say ᡗ

• Policies and procedures is a general set of guidelines at the workplace to designed in line with the company's objective for dealing with an issues and Policies communicate the connection between the organization.

- Ask

- What do you mean Standard practices at a workplace?
- Difference between policy and procedure?

Notes for Facilitation



- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

Explain

- Explain the importance of policies and procedure at the workplace.
- Standard practices at a workplace.

• Describe the difference between policy and procedure with the help of (Fig 6.2.1), given in the Participant Handbook.

Activity

Brief

• Each group must develop a list of difference between policy and procedure.

Activity Description

- Group the students into twos
- Difference between policy and procedure.
- Discuss the standard practices at a workplace.

Debrief

Unit 6.3 - Reporting Structure



At the end of the session, the participants will be able to:

Ø

• Analyse the reporting structure

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide

– Do 📐

• Recall the reporting structure.

– Say | ເ

- There are various types of reporting structure.
 - Vertical structure
 - Horizontal structure

- Ask

- What are reporting structure?
- Types of reporting structure

Notes for Facilitation



- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

- Explain 😽

• What are reporting structure functions?

- Elaborate

• Describe the company's reporting structure with the help of (Fig 6.3.1), given in the Participant Handbook.



Brief

• Each group must develop a list of various types of reporting structure.

Activity Description

- Divide the students in 2 groups
- List down the reporting structure.

Debrief

Unit 6.4 - Inter-Dependent Functions



At the end of the session, the participants will be able to:

• List the inter-dependent functions

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide

– Do 📐

• Explain the inter-dependent functions.

- Say ຊິ

- There are two main components of inter-dependence.
 - Collaboration
 - Delegation
- There are different types of inter-dependence
 - Pooled Inter-dependence
 - Sequential Inter-dependence
 - Reciprocal Inter-dependence

- Ask ask

What is the Inter-dependence?

- Notes for Facilitation

- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

– Explain 🛛

- Explain the different types of Inter-dependence.
- What is inter-dependence functions?

• Describe the process of the concept of Inter-dependence with the help of(Fig 6.4.1), given in the Participant Handbook.

Activity

Brief

• Each group must develop a list of various types of Inter-dependence.

Activity Description

- Group the students into twos
- List down the Process of the concept of Inter-dependence.

Debrief

Unit 6.5 - Harassment and Discrimination

- Unit Objectives

At the end of the session, the participants will be able to:

Ø

• Discuss the impact of harassment and discrimination

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide

– Do 📐

• Describe the impact of harassment and discrimination.

Say S

- There are different types of workplace discrimination.
 - Gender discrimination
 - Age discrimination
 - Race discrimination
 - Skin colour discrimination
 - Mental and physical disability
 - Genetic information
 - Religion discrimination

Ask

What do you mean by harassment and discrimination?

Notes for Facilitation

- Allow maximum participation to answer the questions.
- Explain the correct answers one by one



What are the harassment and discrimination in the workplace.

• Describe the Types of workplace harassment with the help of (Fig 6.5.1 Identification of harassment work), given in the Participant Handbook.

Activity

Brief

• Each group must develop a list of workplace harassment.

Activity Description

- Group the students into twos
- List down the workplace harassment.

Debrief

Unit 6.6 - Prioritising Tasks



At the end of the session, the participants will be able to:

• Monitor the ways of prioritizing the tasks

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide

– Do 📐

• Explain the ways of prioritizing the task.

Say S

- There are seven strategies for prioritizing tasks at the workplace.
 - Having a list that contains all tasks or works in one place
 - Identify what's important
 - Highlight what is necessary
 - Prioritize based on importance
 - Avoid competing with priorities
 - Consideration of the efforts made in the tasks
 - Constantly reviewing task and be realis

- Ask

What do you mean by prioritizing task?

Notes for Facilitation

- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

– Explain 🏻

• What are the prioritize task on the workplace.

• Discuss the different ways to prioritize task on the workplace.

Activity	J.
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Brief

• Each group must develop a list of prioritize task on the workplace.

Activity Description

- Group the students into twos
- List down the prioritize task on the workplace.

Debrief

Unit 6.7 – Communication Skills



At the end of the session, the participants will be able to:

6

Ø

• Record the types of communication skills

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide

– Do 📐

• Discuss the types of communication skills.

Say S

- There are different types of communication skills in the workplace .
 - Body Language (non-verbal)
 - Listening
 - Clarity and Conciseness
 - Friendliness
 - Empathy
 - Confidence
 - Respect

Ask

What is the communication skills?

Notos	for	Facil	litation
NULES	101	rau	πατισπ

• Allow maximum participation to answer the questions.

Explain the correct answers one by one

– Explain 🏻

• Explain the types of communication skills.

- Elucidate the Essential communication skills with the help of (Table 6.7.1), given in the Participant Handbook.
- Elucidate the key active listening skills with the help of(Table 6.7.2), given in the Participant Handbook..

Activity 😥

Brief

• Each group must develop a list of types of communication skills.

Activity Description

- Group the students into twos
- List down the different types of types of communication skills.

Debrief

Unit 6.8 - Teamwork



At the end of the session, the participants will be able to:

6

Ø

• Evaluate the ways of carrying out a teamwork

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide

– Do 📐

• Recall the teamwork.

Say S

- Different tips to improve teamwork in the organization .
 - Encourage informal social events
 - Clarify Roles
 - Reward and recognition
 - Specify long-term as well short-term goals
 - Avoid micro-management
 - Respect Individuality
 - Listen to your employees
 - Feedback
 - Seek feedback



• What do you mean by teamwork?

- Notes for Facilitation

- Allow maximum participation to answer the questions.
- Explain the correct answers one by one



• Explain the teamwork.

• Teamwork is a cumulative effort done by a team or a group of members in order to acquire a common goal or to complete a given work or task in the most effective and powerful way.



Brief

• Each group must develop a list of teamwork in the organization.

Activity Description

- Group the students into twos
- Make them discuss the teamwork tips to improve teamwork in the organization

Debrief
Unit 6.9 - Ethics and Discipline



At the end of the session, the participants will be able to:

(0¹⁰⁾

• Evaluate the ways of carrying out a teamwork

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide

– Do 📐

• Tell about the ethics and discipline.

Say S

- There are many various ways to ethics and discipline.
 - Setting clear goals and objectives
 - Mentoring
 - Set example
 - Need of right work environment
 - Encourage professionalism
 - Discipline
 - Listen to your employees
 - Feedback
 - Rewards and recognition



What do you mean by ethics and discipline?

- Notes for Facilitation

- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

Explain

• Explain the ethics and discipline.

Elaborate

• Discuss about the ethics and discipline.



Brief

• Each group must develop a list of ethics and discipline.

Activity Description

- Group the students into twos
- Ethics and discipline.

Debrief

Unit 6.10 - Grievances Solution



At the end of the session, the participants will be able to:

69³

• Illustration of the grievance's solution

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide

– Do 📐

• Explain the Grievance's Solution.

Say S

- There are various types of grievance's solution.
 - Prompt and timely action
 - Grievance acceptance
 - Collect information
 - Cross verify the grievance cause
 - Decision making
 - Review and implement



• What is grievance's solution?

- Notes for Facilitation

- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

– Explain 🗟

• Explain the grievance's solution.

Elaborate

• Discuss the grievance's solution.

Activity	E.
----------	----

Brief

• Each group must develop a list of five ways in order to address the grievances effectively.

Activity Description

- Group the students into twos
- List down the ways in order to address the grievances effectively.

Debrief

Unit 6.11 - Interpersonal Conflicts



At the end of the session, the participants will be able to:

Recognize the interpersonal conflicts

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide

– Do 📐

• Recall the Interpersonal Conflicts.

Say S

- Different types of ways to resolve conflict at the workplace.
 - Communicate
 - Listen carefully
 - Show empathy
 - Never hold back any grudges
 - Effective communication skill

- Ask ask

• What do you mean by interpersonal conflicts?

Notes for Facilitation



- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

– Explain 占

• Explain the interpersonal conflicts.



Describe the interpersonal conflicts.



Each group must develop a list of ways to resolve conflict at the workplace.

Activity Description

- Group the students into twos
- List down the ways to resolve conflict at the workplace.

Debrief

Unit 6.12 - Disabilities and Challenges



At the end of the session, the participants will be able to:

6

• Identify the disabilities and challenges

Resources to be Used

- Participant handbook •
- Computer ٠
- **Projection Equipment**
- **PowerPoint Presentation and software** •
- Facilitator's Guide •

Do

Explain the disabilities and challenges. •

Say

- There are various ways to disabilities and challenges.
 - **Physical barriers** 0
 - Nature of co-workers and stereotyping 0
 - Communication 0
 - **Policy barriers** 0

Ask (ask)

What is disabilities and challenges? ٠

Notes for Facilitation

- Allow maximum participation to answer the questions. ٠
- Explain the correct answers one by one •

Explain

• What is disabilities and challenges?

Elaborate

Describe the disabilities and challenges. •



Each group must develop a list of disabilities and challenges.

Activity Description

- Group the students into twos
- List down the disabilities and challenges.

Debrief

Unit 6.13 - Gender Sensitivity and Discrimination



At the end of the session, the participants will be able to:

• Identify the disabilities and challenges

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide

– Do 📐

• Discuss the gender sensitivity and discrimination.

- Say | ເ

• Gender sensitivity and discrimination has also been an ongoing dialogue inside the workplace.

- Ask ask

• What do you mean by gender sensitivity and discrimination?

Notes for Facilitation

- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

Explain

- What is disabilities and challenges?
- Gender sensitivity and discrimination.

Elaborate

• Describe the gender sensitivity and discrimination.



• Each group must develop a list of gender sensitivity and discrimination.

Activity Description

- Group the students into twos
- Gender sensitivity and discrimination.

Debrief

Unit 6.14 - Applicable Legislation, Grievance Redressal Mechanisms

- Unit Objectives

At the end of the session, the participants will be able to:

• Discuss the applicable legislations, grievance redressal mechanisms

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide

– Do 📐

• Explain the applicable legislations, grievance redressal mechanisms.

– Say | ຊ

• In India, certain central and state-specific labour laws require the employer to adopt certain grievance redressal mechanisms at the workplace.

— Ask ask

What do you mean by grievance redressal mechanisms?

Notes for Facilitation

- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

Explain

- What is applicable legislations?
- Explain the grievance redressal mechanisms.

Elaborate

• Discuss the applicable legislations grievance redressal mechanisms.



• Each group must develop a list of grievance redressal mechanisms.

Activity Description

- Group the students into twos
- Explain the grievance redressal mechanisms.

Debrief

Unit 6.15 - Transacting With Others without Personal Bias

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– Unit Objectives 🛛 🎯

At the end of the session, the participants will be able to:

• To administer with others without personal bias

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide

– Do 📐

• Describe the Personal Bias.

Say Sa

- Personal Bias includes.
- Recognizing an individual's own biases
- Focusing on people
- Increasing exposure to biases

- Ask ask

• What are Personal Bias?

- Notes for Facilitation

- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

Explain 🕎	
• What are Personal Bias.	
Elaborate	
Explain the Personal Bias.	

Activity	E.
----------	----

• Each group must come up with a list of personal bias.

Activity Description

- Group the students into twos
- List down the personal bias.

Debrief

Notos 🔲 –		
Notes 📋 -		
	 	· · · · · · · · · · · · · · · · · · ·











7. Material Conservation

Unit 7.1 Material Handling

- Unit 7.2 Workstation Layout, Electrical and Thermal Equipment
- Unit 7.3 Organisational Procedures for Minimising Waste
- Unit 7.4 Practices of Efficient and Inefficient Management
- Unit 7.5 Material and Water Usage



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Key Learning Outcomes

At the end of this module, you will be able to:

- Identify the ways to handle materials.
- Categorize the workstations layouts, electrical and thermal equipment.

Ö

- List the organizational procedures for minimizing waste.
- Analyze the practices of efficient and inefficient management.
- Discuss the material and water usage.

Unit 7.1 - Material Handling



At the end of the session, the participants will be able to:

• Identify the ways to handle materials

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide

– Do 📐

- Discuss the different ways to handle materials.
- Describe the hazards, risks and threats associated with handling different materials

Say 🔓

• There are different types of material handling equipment

- Ask 🔤

- What do you mean by ways to handle materials?
- What is the loading and unloading materials?
- How to maintain package?

Notes for Facilitation

- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

- Explain

- There are different kinds of material handling equipment.
- There are multiple hazards, risks and threats can be identified during receiving, loading & unloading, storage, and transportation for handling different types of materials.



• Show about the Electricity utilization.

Activity Description

- Group the students into twos
- Discuss the Inspection of vehicles
- Explain about the loading and unloading of materials.
- Show how to organize the raw materials, packaging materials, workforce, equipment.

Debrief

Unit 7.2 - Workstation Layout, Electrical and Thermal Equipment

- Unit Objectives

At the end of the session, the participants will be able to:

• Categorize the workstation layouts, electrical and thermal equipment

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide

– Do 📐

• Discuss the workstation layouts, electrical and thermal equipment.

- Say | ม

- Various factors of storage space requirement.
- Ensure about the workplace layout design and proper cleanliness in workplace.

- Ask as

- What is the electrical and thermal equipment?
- What do you mean by workplace layout design?

Notes for Facilitation

- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

— Explain 🖓

• List the different ways to workstation layouts, electrical and thermal equipment.

Elaborate

• Workstation layouts, electrical and thermal equipment

Activity

Brief

• Conduct Bakery Equipment Scavenger Hunt.

Activity Description

- Divide the group into teams of 3-5 people.
- Provide each team with a list of bakery equipment and tools, such as ovens, mixers, proofing cabinets, cooling racks, baking sheets, etc.
- Give each team a map of the bakery workstation layout or a physical layout if possible.
- Explain that they need to find and photograph (or write down) each piece of equipment on the list within a certain amount of time, depending on the size of the bakery and the complexity of the layout.
- As a bonus, teams can also be encouraged to identify any electrical and thermal equipment, such as circuit breakers, electrical outlets, and ventilation systems, and take photos of them as well.
- Once the time is up, teams can compare their findings and discuss how the equipment is used in the baking process, as well as the importance of proper electrical and thermal management in a bakery.

Debrief

Unit 7.3 - Organisational Procedures for Minimising Waste

- Unit Objectives

At the end of the session, the participants will be able to:

• List the organizational procedures for minimising waste.

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide

– Do 📐

- Recall the organizational procedures for minimising waste.
- List the various types organizational waste

- Say 🔓

- There are different types of organizational waste and ways to minimise them.
 - Transportation
 - Inventory
 - Motion
 - Waiting
 - Overproduction

- Ask ask

• Organizational procedures for minimising waste?

- Notes for Facilitation



- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

— Explain 🏻

• Organizational procedures for minimizing waste.

Elaborate

• Elucidate the Overproduction with the help of (figure 7.3.1), given in the participant handbook

Activity 😥

Brief

• List the various types of organizational waste .

Activity Description

- Group the students into twos
- Ask student to list the procedures for minimising waste.

Debrief

Unit 7.4 - Practices of Efficient and Inefficient Management

- Unit Objectives

At the end of the session, the participants will be able to:

• Analyse the practices of efficient and inefficient management.

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide

– Do 📐

• Explain the practices of efficient and inefficient management.

Say S

- There are various ways of inefficient management.
 - Uneven prioritization of work
 - Non-essential work
 - Lack of resource planning
- The Efficient Management Practices:-
 - Consistency
 - Goal setting
 - Delegation
 - Task prioritization
 - Effective communication



- What is the Inefficient Management Practices?
- What are the Efficient Management Practices?

Notes for Facilitation

- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

Explain 🖓

• Explain about the practices of efficient and inefficient management.



Brief

• Show about the inefficient management practices and efficient management practices .

Activity Description

- Group the students into twos
- Efficient and inefficient management.

Debrief

Unit 7.5 - Material and Water Usage



At the end of the session, the participants will be able to:

• Discuss the material and water usage.

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide

– Do 📐

Explain the material and water usage.

- Say | ม

• Water is used for various purposes.

- Ask 🔤

- What is the Material Usage?
- What do you mean by the Water Usage?

- Notes for Facilitation

- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

— Explain 🗄

• Explain about the Material Usage, Water Usage, Industrial usage of water.

Elaborate

- Elucidate the Industry-wise water consumption with the help of (figure 7.5.1), given in the participant handbook
- Elucidate the Industrial wastage of water with the help of (figure 7.5.2), given in the participant handbook

Activity	E.
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• Show material and water usage methods.

Activity Description

- Group the students into twos
- Ask students to make list of Industry-wise water consumption.
- List the 2-3 Industrial usage of water.

Debrief

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- Notes 🚞 -		
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8. Energy and Electricity Conservation

Unit 8.1 Define Electricity

Unit 8.2 Basics of electricity

Unit 8.3 Energy efficient devices

Unit 8.4 Standard Practices for Conserving Electricity





Key Learning Outcomes

At the end of this module, you will be able to:

- Define electricity.
- State the basics of electricity.
- Identify the energy-efficient devices.
- Explain the standard practices to be followed for conserving electricity.

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• Illustrate electrical equipment and appliances.

Unit 8.1 - Define Electricity



At the end of the session, the participants will be able to:

e de la constante de la consta

• Define Electricity.

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide

- Do 🗸

- Recall the Definition of Electricity.
- Explain about the different coloured dustbins.

- Say 뎗

• Electric current is used to energies equipment.



• What is the Electricity?

– Notes for Facilitation

- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

🛛 Explain 🔤

Explain about the Electricity utilization.

– Elaborate 🕲

• Elucidate the Electricity utilization with the help of (figure 8.1.1), given in the participant handbook



• Show about the Electricity utilization methods.

Activity Description

- Group the students into two.
- Ask to make Electricity utilization methods they have used.
- Discuss with the class about the outcomes.

Debrief

Unit 8.2 - Basics of electricity - Unit Objectives At the end of the session, the participants will be able to: • State the Basics of electricity. **Resources to be Used** Participant handbook • Computer ٠ **Projection Equipment** • **PowerPoint Presentation and software** • Facilitator's Guide ٠ Do Discuss the basics of electricity. Say There are three primary electrical parameters. 0 Volt 0 Ampere Ohm 0 Ask (ask) What do you mean by basics of electricity? **Notes for Facilitation** Allow maximum participation to answer the questions. • • Explain the correct answers one by one **Explain**

• Parameters to check Electricity.

- Elaborate

• Elucidate the Conductor of Electricity with the help of (figure 8.2.1), given in the participant handbook

Activity

Brief

• Demonstrate activity where participants learn how to wire and troubleshoot a basic electrical circuit commonly found in a bakery.

Activity Description

- Group the students into twos
- Introduce the basics of electricity and the electrical components commonly found in a bakery.
- Provide a live demonstration of how to wire a basic circuit, such as a switch controlling a light bulb or a mixer.
- Once participants have wired their own circuits, provide a troubleshooting exercise where they must identify and fix common electrical problems, such as a loose wire or a blown fuse.

Debrief

Unit 8.3 - Energy Efficient Devices



At the end of the session, the participants will be able to:

• Identify the Energy efficient devices.

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide

- Do 📐

- Describe the energy-efficient devices.
- Explain about the common ways to identify electrical problems.

Say Say

• There are different uses of energy-efficient devices.

- Ask

- What are the energy-efficient devices?
- What do you mean by Energy Conservation?

Notes for Facilitation



- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

— Explain 😽

• Ensure about the different ways to identify electrical problems.

- Elaborate

• Elucidate the Energy-efficient devices with the help of (figure 8.3.1), given in the participant handbook



• Electrical equipment involves any machine powered by electricity.

Activity Description

- Group the students into twos
- Energy-efficient devices.

Debrief

Unit 8.4 - Standard Practices for Conserving Electricity

- Unit Objectives 🏼 🤇

At the end of the session, the participants will be able to:

• Explain the standard practices s for conserving electricity.

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide

– Do 📐

• Discuss the Standard Practices for Conserving Electricity.

- Say 🔓

• Practices for saving electricity can be good for the pocket.

Ask ask

- What are the saving electricity?
- What is the conserve electricity?

Notes for Facilitation

on 🗐

- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

Explain

• Environmental reasons to conserve electricity and Practices for saving electricity.



• Standard practices for conserving electricity.



• Different ways to conserving electricity and saving electricity.

Activity Description

- Group the students into twos
- Saving Electricity.

Debrief

- Notes 📋		
Notes		
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9. Waste Management and Recycling

Unit 9.1 Types of Waste

Unit 9.2 Waste Management and Disposal Solutions

Unit 9.3 Pollution and Remedies



SGJ/N1702

Key Learning Outcomes

At the end of this module, you will be able to:

- List the types of wastes.
- Describe waste management and disposal solutions.

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• Explain pollution and its remedies.

Unit 9.1 – Types of Waste



At the end of the session, the participants will be able to:

Ø

• List the different types of waste.

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide

– Do 📐

- Discuss the different types of wastes.
- Explain about the different coloured dustbins.

- Say 🔓

- There are different types of wastes.
 - Recyclable waste
 - Non-recyclable waste
 - There are different types of dustbins
 - Green
 - Blue
 - Red

- Ask ask

• What do you mean by Recyclable waste and Non-recyclable waste?

– Notes for Facilitation

- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

Explain 🖓

• Explain the Hazardous wastes and Municipal Waste.

Elaborate

- Elucidate the Hazardous wastes with the help of (figure 10.1.1), given in the participant handbook
- Elucidate the Ways to process industrial and biomedical wastes with the help of (figure 10.1.2), given in the participant handbook
- Explain the Examples of waste collected with the help of (figure 10.1.3), given in the participant handbook

Activity

Brief

• List the different ways to waste management.

Activity Description

- Group the students into a group of four.
- Lists of different types of waste.

Debrief

• Request the class questions like, "What did we do in this activity?" to summarise the experience. What did this activity teach us?

Notes	 		

Unit 9.2 - Waste Management and Disposal Solutions

- Unit Objectives

At the end of the session, the participants will be able to:

• Describe waste management and disposal solutions.

Resources to be Used

- Participant handbook
- Computer
- Projection Equipment
- PowerPoint Presentation and software
- Facilitator's Guide



Discuss the waste management and disposal Solutions.

– Say | ເ

• There are different waste management procedure and disposal solutions.



• What are the waste management?

- Notes for Facilitation

- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

Explain

• Explain the Hazardous wastes and Municipal Waste.

Elaborate

- Elucidate the Waste management and disposal solutions with the help of (figure 9.2.1), given in the participant handbook
- Elucidate the Waste Management Hierarchy with the help of (figure 9.2.2), given in the participant handbook

Activity	E.
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Brief

• Each group must develop a list of Waste Management and Disposal Soluof a baking technician /operative in the baking industry.

Activity Description

- Group the students into a group of four.
- Explain the Waste Management Hierarchy.

Debrief

• Request the class questions like, "What did we do in this activity?" to summarise the experience. What did this activity teach us?

Notes 🛗 🗕 —		
,	 	

Unit 9.3 - Pollution and Remedies



• What do you mean by pollution?

Notes for Facilitation

- Allow maximum participation to answer the questions.
- Explain the correct answers one by one

– Explain 🛛

• Different types of pollution.

Elaborate

• Pollution and its remedies.



Brief

• Each group must develop a list of pollution and remedies.

Activity Description

- Group the students into a group of four.
- Explain the pollution. .

Debrief

• Request the class questions like, "What did we do in this activity?" to summarise the experience. What did this activity teach us?

— Notes 📋 —		
Notes		











10. Employability Skills



https://www.skillindiadigital.gov.in/content/list















11. Annexures

Annexure - i (Training Delivery Plan) Annexure - ii (Assessment Criteria) Annexure - iii (QR Codes)



Annexure I (Training Delivery Plan)

S No.	Module Name	Session Name	Session Objectives	NOS Reference	Methodology	Training Tools Aids	Duration
		Introduction to Food Processing Industry	Discuss the size and scope of the food processing industry in brief		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:2 P:0
		Introduction to Food Processing Industry (Contd)	Discuss the role and responsibilies of the Spice Processing Technician.		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:1 P:0
		Future Trends and Career growth Opportunies Available to the Spice Processing Technician.	Examine the forthcoming trends and potential career advancements accessible to individuals working as Spice Processing Technicians.		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:1 P:0
1	Overview of Food Processing Industry	Role and Responsibilies of Spice Processing Technician	Discuss the responsibilities and duties carried out by a Spice Processing Technician.	FIC/N8515	Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:1 P:0
	muustry	Terminology Used in the Spice Processing Industry	Discuss the common Terminology used in the Spice Processing Industry.		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:1 P:0
		Policies to be Followed on the Delivery, Health, Safety and Hazard Handling Standards, Integrity, Dress Code, etc.	Understand the policies and guideli- nes to be adhered to regarding delivery, health and safety, hazard handling standards, integrity, dress code, and other relevant aspects.		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:1 P:0
		Importance of Planning Before Starting Work	Significance of undertaking planning activities prior to commencing work.		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:1 P:0
		Planning for Spice Production	Explain the production planning process in spice processing.		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:2 P:4
		Planning for Spice Production (Contd)	Interpret process diagram, product flow diagram etc.		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:2 P:4
		Planning for Spice Production (Contd)	Outline best practices to be followed for spice processing.		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:2 P:4
		Planning for Spice Production (Contd)	Understand the management of resources and required equipment.		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:2 P:4
		Planning for Spice Production (Contd)	Understand how to maintain tools and equipment used in spice production.		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:2 P:4
2	Prepare for Spice Production	Clean and Maintain Work Area, Machinery & Tools	State cleaning and maintenance of work area, machines and tools per organisational standards.	FIC/N9026	Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:2 P:4
		Clean and Maintain Work Area, Machinery & Tools	State waste management process.		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:2 P:4
		Clean and Maintain Work Area, Machinery & Tools (Contd)	State techniques of tool, equipment and machinery inspection.		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:2 P:4
		Organizing for Spice Production	Explain how to organise tools and equipment used in spice production.		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:2 P:4

S No.	Module Name	Session Name	Session Objectives	NOS Reference	Methodology	Training Tools Aids	Duration
		Organizing for Spice Production (Contd)	Explain the process of receiving and organising production materials.		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:1 P:2
		Organizing for Spice Production (Contd)	Explain how to allocate work and responsibilities among team members.		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:1 P:2
		Basics of Spice Processing	Understanding the use and role of raw ingredients in the process of producing spice and seasonings		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:5 P:13
		Basics of Spice Processing(Contd)	Quality control during the spice manufacturing process		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:5 P:13
		Basics of Spice Processing(Contd)	FSSAI regulations to be followed for manufacturing of spice and seasonings		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:4 P:13
		Process for Preparing Different Spices and Seasonings	Discuss the spice manufacturing process for whole spices, curry powders and seasoning		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:4 P:13
3	Product Spice	Packaging and Labelling of Various Spice Products	Discuss the aspect of packaging spices and spice products.	FIC/N8515	Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:4 P:13
5	and Seasonings	Packaging and Labelling of Various Spice Products(Contd)	Explain methods of packaging spices and materials used for packaging.	110/110313	Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:4 P:13
		Packaging and Labelling of Various Spice Products(Contd)	Explain FSSAI standards applicable for the labelling of spice products.		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:4 P:13
		Post-production Cleaning and Regular Maintenance of Equipment	Understand the importance of cleaning and maintenance of equipment		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:4 P:13
		Post-production Cleaning and Regular Maintenance of Equipment (Contd)	Explain methods of post-production cleaning such as CIP & COP.		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:4 P:13
		Post-production Cleaning and Regular Maintenance of Equipment (Contd)	Explain the basic troubleshooting techniques of production machinery		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:4 P:13
		Introduction to Food Safety	Identify types of hazards and risks at work place		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:1 P:2
		Schedule IV requirements of FSSAI	Identify requirements in Schedule IV in FSSAI		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:1 P:2
		Identify requirements in Schedule IV in FSSAI	Identify types of health and safety policies and procedures		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:0.5 P:1
4.	Ensuring Food Safety and	Health Safety	Illustrate the concept of health safety	FIC/N9901	Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:0.5 P:1

S No.	Module Name	Session Name	Session Objectives	NOS Reference	Methodology	Training Tools Aids	Duration		
	Personal Hygiene	Health Safety(Contd)	Understand the hazards of health safety		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:0.5 P:1		
		Health Safety(Contd)	Explain the health and safety policies and procedures		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:0.5 P:1		
		Health Safety(Contd)	Describe the personal protective equipment		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:0.5 P:1		
		Health Safety(Contd)	Discuss the types of personal protective equipment		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:0.5 P:1		
		Hazard, Risk and Accidents	Identify the types of hazards, risks as well as accidents		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T : 0.4 P : 0.8		
		Standard Procces and Precautions	Categorize the standard precautions and proccess		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T : 0.4 P : 0.8		
		Uses of Electrical Equipment	Examine the utilization of the electrical equipment		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T : 0.4 P : 0.8		
		Usage of Personal Protective Equipment	Explore the usage of personal protective equipment				Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T : 0.4 P : 0.8
		Explore the usage of personal protective equipment	Recognizing the organizational protocols			Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T : 0.4 P : 0.8	
		Dealing with Toxics	Monitor the ways to handle the toxics		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T : 0.4 P : 0.8		
5	Managing Accidents and Emergencies	Fire Prevention and Fire Extinguishers	Identify fire prevention and fire extinguisher	FIC/N9901	Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T : 0.4 P : 0.8		
		Arficial Respiration and CPR	Evaluate CPR as well as the artificial respiration		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T : 0.4 P : 0.8		
		Rescue and Evacuation In Case Of Fire	Discuss the evacutation and rescue during a fire incident		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T : 0.4 P : 0.8		
		First Aid	Cataloguing the first aids		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T : 0.4 P : 0.8		
		Cataloguing the first aids	Understanding the ill health as well as potential injuries		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T : 0.4 P : 0.8		
		Precautions in Mobility	Demonstration of the precautions in mobility		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T : 0.3 P : 0.6		

S No.	Module Name	Session Name	Session Objectives	NOS Reference	Methodology	Training Tools Aids	Duration			
		Significance of various types of hazard and safety signs	Understanding the impact of various types of hazard and safety signs		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T : 0.3 P : 0.6			
		Organizational Policies	Categorize the organizational policies		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:1 P:2			
		Legislations, standard, policies, and procedures	Catalogue the Legislations, standards, policies, and procedures		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:1 P:2			
		Reporting Structure	Analyse the reporting structure		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:1 P:2			
		Inter-Dependent Functions	List the inter-dependent functions		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:1 P:2			
		Harassment and Discrimination	Discuss the impact of harassment and discrimination		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:1 P:2			
		Priorising Tasks	Monitor the ways of priorising the task	FIC/N9902				Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:0.5 P:1
		Communication Skills	Record the types of communication skills		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:0.5 P:1			
6	Working Effecvely in an Organization	Teamwork	Evaluate the ways of carrying out a teamwork		FIC/N9902	FIC/N9902	Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:0.5 P:1	
		Ethics and Discipline	Highlight the ethics and discipline		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:0.5 P:1			
		Grievances Solution	Illustration of the grievance's solution		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:0.5 P:1			
		Interpersonal Conflicts	Recognize the interpersonal conflicts		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:0.5 P:1			
		Disabilies and Challenges	Identify the disabilies and challenges		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:0.5 P:1			
		Working Effecuely in an organization Organizational Policies Catalogue the Legislations, standards, policies, and procedures Interacti Class Working Effecuely in an organization Reporting Structure Analyse the reporting structure Interacti Lecture in Class Working Effecuely in an organization Inter-Dependent Functions List the inter-dependent functions Interacti Lecture in Class Working Effecuely in an organization Priorising Tasks Monitor the ways of priorising the task Interacti Lecture in Class Efficuely in an organization Teamwork Record the types of communication skills Fic/N9002 Interacti Lecture in Class Efficuely in an organization Teamwork Evaluate the ways of carrying out a teamwork Fic/N9002 Interacti Lecture in Class Efficuely in an organization Teamwork Recognize the interpersonal conflicts Fic/N9002 Interacti Lecture in Class Efficuely in an organization Interacti Lecture in Class Interacti Lecture in Class Interacti Lecture in Class Disabilies and Challenges Identify the disabilies and challenges Interacti Lecture in Class Disabilies and Challenges Identify the disabilies and challenges Interacti Lecture in Class	Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:0.5 P:1					
		Redressal						Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:0.5 P:1
		-			Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:0.5 P:1			

S No.	Module Name	Session Name	Session Objectives	NOS Reference	Methodology	Training Tools Aids	Duration
		Material Handling	ldentify the ways to handle materials		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:1 P:2
		Workstation Layout, Electrical and Thermal Equipment	Categorize the workstation layouts, electrical and thermal equipment		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:1 P:1
7	Material Conservaon	Organisational Procedures for Minimising Waste	List the organizational procedures for minimising waste.	SGJ/N1702	Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:1 P:1
		Practices of Efficient and Inefficient Management	Analyse the practices of efficient and inefficient management		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:0.5 P:1
		Material and Water Usage	Discuss the material and water usage.		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:0.5 P:1
		Define Electricity	Define electricity		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:1 P:2
8	Energy and Electricity	Basics of electricity	State the basics of electricity	SGJ/N1702	Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:1 P:2
0	Conservation	Energy efficient devices	Identify the energy-efficient devices	301/01/02	Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:1 P:1
		Standard Practices for Conserving Electricity	Explain the standard practices for conserving electricity		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:1 P:1
		Types of waste	List the different types of waste		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:2 P:2
9	Waste Management and Recycling	Waste Management and Disposal Solutions	Describe waste management and disposal solutions	SGJ/N1702	Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:1 P:2
		Pollution and Remedies	Explain pollution and its remedies		Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:1 P:2
10	Employability Skills			DGT/VSQ/N0101	Interactive Lecture in the Class	Participant handbook, Projector Whiteboard, Marker, and Duster	T:12 P:18

Annexure - II Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Plan for production	11	25	-	-
PC1. identify work requirements by obtaining instructions from the supervisor. Instructions: process chart, product flow chart, formulation, chart, etc.	3	6	-	-
PC2. plan and prioritize tasks as per work schedule.Tasks: inspect, clean, maintain, verify, etc.	2	5	-	-
PC3. estimate manpower and material requirements as per work requirement. Material: raw materials and packaging materials	2	4	-	-
PC4. ensure required quantity of raw materials, packaging materials, equipment, and manpower for production	2	5	-	-
PC5. plan capacity utilization of machinery with respect to the processing time, production order, and batch size for each product	2	5	-	_
Clean and maintain work area, machineries, and tools for production	14	32	-	-
PC6. clean and maintain the work area as per organizational procedures	3	7	-	-
PC7. clean and maintain the machines and tools and sanitize them as per the organization's specifications and standards	3	7	-	-
PC8. dispose of the waste material at designated place safely. Waste material: hazardous waste, food waste, packaging waste, etc.	3	7	-	-
PC9. inspect the tools, equipment, and machinery to ascertain suitability for use	3	6	-	-
PC10. report information such as faulty tools and equipment to the concerned authority	2	5	-	-
Organize for production	5	13	-	-
PC11. organize tools and equipment	2	7	-	-
PC12. receive and organize production materials appropriately. Production materials: raw materials, packaging materials, etc.	2	4	-	-

PC13. allot responsibilities/work to the assistants and helpers	1	2	_	_
NOS Total	30	70	-	-
Produce whole spices	8	8	-	4
PC1. clean unprocessed whole spices thoroughly to ensure complete removal of dirt and foreign particles	_	-	_	_
PC2.				
 set controls of the dryer for drying the whole spices adequately and spread it out in the sun as required Controls of the dryer: conveyor speed, drying temperature, relative humidity, time, etc. 	-	-	-	_
PC3. transfer the dried whole spices to the cutting machine safely ensuring zero spillage	_	-	_	_
PC4. set controls of the cutting machine to obtain the powdered whole spices for further processing	-	-	_	-
PC5. sterilize the whole spices by operating controls of the sterilizer (temperature, time, pressure, water level, etc.) as per standard procedure	-	-	-	-
PC6. monitor the process and set desired limits for critical control points (CCP) to ensure food safety and prevent contamination	-	-	-	-
PC7. inspect the produced samples for desired parameters such as colour, size, etc. thoroughly	-	-	-	-
 PC8. handover the produced samples to the quality lab for testing as per organisational practice Parameters: moisture content, colour retention, size, etc. 	-	-	-	-
Produce Spice and Curry Powder	13	16	-	5
PC9. sort and grade the whole spices on the basis of colour, size, appearance, etc. as per production requirements	-	-	-	-
PC10. set control of the roasting machine (such as temperature and time) and monitor the process to ensure adequate roasting of the whole spice	-	-	_	-

PC11. carry out grinding by placing the spices safely and adjusting the grinder screens as per standard practicePC12. collect the ground spices in container, bags, etc. and allow it to cool adequately <th></th> <th></th> <th></th> <th></th> <th></th>					
and allow it to cool adequatelyPC13. adjust screens in the sifting/sieving machine as per processing needs </td <td></td> <td>-</td> <td>-</td> <td>_</td> <td>_</td>		-	-	_	_
per processing needsPC14. sieve the spices to ensure removal of physical contaminants and required fineness for the spice powderPC15. • operate blending machine to produce various types of curry powder as per work requirements • Curry powder: chilli powder, turmeric powder, cumin seeds, dried mango powder, coriander powder, mustard seeds, etc<		-	-	_	_
contaminants and required fineness for the spice powderImage: Image: Im		-	-	-	_
 operate blending machine to produce various types of curry powder as per work requirements Curry powder: chilli powder, turmeric powder, cumin seeds, dried mango powder, coriander powder, mustard seeds, etc. PC16. operate the sterilization equipment(pressure, temperature, sterilization time, etc.) for the removal of microbial contaminants using industry recommended chemicals PC17. set controls of the vacuum drying chamber (temperature, pressure, time, etc.) and transfer the sterilized spices for drying adequately PC18. collect curry powder as per standard practice and let it cool adequately before packaging PC19. handover the sample of spice and curry powder to the quality lab for testing as per standard practice PC20. addi ngredients to prepare a mixture for blending as per type of seasoning to be produced Ingredients: whole spices, salt, oleoresins, spice, liquid flavors, curry, ground spices etc. PC21. sieve the mixture to obtain required fineness for 	contaminants and required fineness for the spice		-	-	-
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seeds, dried mango powder, coriander powder, mustard seeds, etc.Image: second		-	-	_	_
temperature, sterilization time, etc.) for the removal of microbial contaminants using industry recommended chemicalsImage: Second	seeds, dried mango powder, coriander powder,				
(temperature, pressure, time, etc.) and transfer the sterilized spices for drying adequatelyImage: Sterilized spices for drying adequatelyPC18. collect curry powder as per standard practice and let it cool adequately before packagingImage: Sterilized spice and curry powder to the quality lab for testing as per standard practiceImage: Sterilized spice and curry powder to the quality lab for testing as per standard practiceImage: Sterilized spice and curry powder to the quality lab for testing as per standard practiceImage: Sterilized spice and curry powder to the quality lab for testing as per standard practiceImage: Sterilized spice and curry powder to the quality lab for testing as per standard practiceImage: Sterilized spice and curry powder to the quality lab for testing as per standard practiceImage: Sterilized spice and curry powder to the quality lab for testing as per standard practiceImage: Sterilized spice and curry powder to the quality lab for testing as per standard practiceImage: Sterilized spice and curry powder to the quality lab for testing as per standard practiceImage: Sterilized spice and curry powder to the quality lab for testing as per standard practiceImage: Sterilized spice and curry powder to the quality lab for testing as per standard practiceImage: Sterilized spice and curry powder to the quality lab for testing as per standard practiceImage: Sterilized spice and curry powder to the quality lab for testing as per standard practiceImage: Sterilized spice and curry powder to the quality lab for testing as per standard practiceImage: Sterilized spice and curry powder to the quality lab for testing as per standard practiceImage: Sterilized spice and curry powder to the quality lab for testing as per standard practiceImage: St	temperature, sterilization time, etc.) for the removal of microbial contaminants using industry recommended	-	-	-	_
let it cool adequately before packagingPC19. handover the sample of spice and curry powder to the quality lab for testing as per standard practiceProduce Seasonings682PC20. • add ingredients to prepare a mixture for blending as per type of seasoning to be produced • Ingredients: whole spices, salt, oleoresins, spice, liquid flavors, curry, ground spices etcPC21. sieve the mixture to obtain required fineness for	(temperature, pressure, time, etc.) and transfer the	-	-	-	-
to the quality lab for testing as per standard practiceProduce Seasonings68-2PC20• add ingredients to prepare a mixture for blending as per type of seasoning to be produced• Ingredients: whole spices, salt, oleoresins, spice, liquid flavors, curry, ground spices etcPC21. sieve the mixture to obtain required fineness for		-	-	-	-
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 add ingredients to prepare a mixture for blending as per type of seasoning to be produced Ingredients: whole spices, salt, oleoresins, spice, liquid flavors, curry, ground spices etc. PC21. sieve the mixture to obtain required fineness for 	Produce Seasonings	6	8	-	2
per type of seasoning to be produced• Ingredients: whole spices, salt, oleoresins, spice, liquid flavors, curry, ground spices etcPC21. sieve the mixture to obtain required fineness for	PC20.				
flavors, curry, ground spices etc. PC21. sieve the mixture to obtain required fineness for		-	-	_	_
		-	-	-	-

PC22. monitor the process and set desired limits for critical control points (CCP) to ensure food safety and prevent contamination	-	-	-	-
PC23. collect the seasoning as per standard practice and let it cool adequately	-	-	-	-
PC24. handover a sample of the seasoning produced to the quality lab for testing	-	-	_	-
PC25. document significant findings such as process parameters, product details, defects observed, etc. as per organisational practices	_	-	_	-
Wrap and Label the Products	13	20	-	3
PC26.				
 load the desired packaging material on the machine appropriately to prepare for packaging 	-	-	_	-
• Packaging material: jute bags, airtight glass bottles, polyester laminates, biaxially oriented polypropylene laminates, duplex boxes, aluminium pouches, etc.				
PC27. load the type of spices on the machine for packaging such as whole and powdered spices, curry powders, seasonings, etc.	-	-	-	-
PC28. set controls of the packaging machine and control the in feed	_	-	-	_
PC29. monitor the packaging process to ensure compliance with the industry standards	_	_	-	-
PC30.				
• record information (manual, ERP, etc.) of finished products details as per FSSAI regulations of packaging and labelling, 2011				
• Details: name of the product, net weight, name and address (manufacturer, packer, distributor, importer, exporter or vendor), batch number, date manufac turing /packing, best before or use date, veg	-	-	-	-
/non-veg logo, FSSAI registration number, ingredient declaration, nutritional value, etc.				
PC31. check for presence of metallic substances in the packaged spices and curry powders using organisational practices	-	-	-	-

PC32. report information such as variances in product characteristics to the supervisor accurately	-	-	-	-
PC33. document and maintain production records as per organisational work practices	_	_	_	_
PC34. verify documents and track from finished product to ingredients, in case of quality concerns and for quality management system audits	_	_	-	-
PC35. transfer the products to quality lab for analysis and shelf life study	-	_	_	-
Post product cleaning and regular maintenance of equipment	3	5	_	1
PC36. clean work area, machinery, equipment and tools using recommended cleaning agents and sanitizers after completion of production tasks	-	-	-	-
PC37. inspect the tools, equipment and machinery to identify defects and ensure their upkeep and maintenance	-	-	-	-
PC38. report equipment faults to the concerned department/supervisor as per organisational practice	_	_	_	-
NOS Total	43	57	-	15
Ensure food safety and personal hygiene	7	1 9	-	-
PC1. follow relevant practices to avoid cross contamination at all stages of food processing operations	1	4	-	-
PC2. follow organisational procedures for handling items that may cause allergic reactions	1	4	-	-
PC3. follow Good Manufacturing Practices (GMP) at the workplace. Good Manufacturing Practices: location and layout (ergonomics), cleaning and sanitation, equipment and containers, pest control, facilities (lighting, water supply, drainage and waste disposal, air quality and ventilation), food storage, transportation, and distribution (Source: Schedule IV, FSSAI Licensing and Registration, 2011)	3	7	_	-

PC4. follow Good Hygiene Practices (GHP) at the workplace appropriately. Good Hygiene Practices: use of gloves, hairnets, masks, ear plugs, goggles, shoes etc; washing hands regularly; treating injuries such as cuts, boils, skin infections and grazes; preventive health check-ups ; getting vaccinated whenever required. (Source: Schedule IV, FSSAI Licensing and Registration, 2011)	2	4	-	_
Follow safety measures to avoid accidents	11	24	-	-
PC5. use protective clothing/equipment for specific tasks and work conditions	2	4	_	-
PC6. identify job-site hazardous work and possible causes of risk or accident at the workplace	2	4	-	-
PC7. deal with hazards safely and appropriately to ensure safety of self and others as per organisational protocol	2	4	_	-
PC8. use various types of fire extinguishers effectively	2	4	-	_
PC9. respond promptly and appropriately to an accident situation or medical emergency	1	4	-	_
PC10. provide cardio-pulmonary resuscitation (CPR) as per the requirement (e.g. cardiac arrest)	2	4	_	_
Follow emergency procedures	6	12	-	-
PC11. follow workplace emergency and evacuation procedures	2	4	_	-
PC12. use safe methods to free a person from electrocution	2	4	_	_
PC13. administer appropriate first aid to victims in case of cuts, bleeding, burns, choking, electric shock, poisoning etc.	2	4	-	-
Manage infection control	6	15	-	-
PC14. use appropriate disinfectants to disinfect the work area and equipment as per organisational protocol	3	7	-	-
PC15. ensure personal hygiene by washing hands regularly using alcohol based sanitisers and wearing personal protective equipment (PPE)	1	4	-	-

PC16. report illness of self and others to the supervisor or concerned authority	2	4	_	_
NOS Total	30	70	-	-
Communicate effectively	8	13	-	-
PC1. obtain complete information and instructions from designated personnel	2	3	-	-
PC2. reciprocate understanding and seek clarifications whenever required	2	3	-	-
PC3. provide information accurately and clearly	2	3	-	-
PC4. use inclusive language (verbal, non- verbal and written) that is gender, disability and culturally sensitive	2	4	-	-
Work in a team effectively	8	14	-	-
PC5. plan tasks to be performed as per priority and need	2	4	-	_
PC6. consult with and assist others to maximize effectiveness and efficiency at work	2	3	-	-
PC7. escalate problems and grievances beyond own scope to the concerned authority	2	3	_	_
PC8. take appropriate action to resolve conflicts at the workplace	2	4	-	_
Respect diversity	6	12	-	-
PC9. maintain a gender-neutral behaviour with everyone at the workplace	2	4	-	_
PC10. empathise with People with Disabilities (PwD) and offer help, if required	2	4	-	-
PC11. recognise and report incidents of harassment and discrimination to appropriate authority	2	4	-	-
NOS Total	22	39	-	-
Material conservation practices	4	8	-	-
PC1. identify ways to optimize usage of material including water in various tasks/activities/processes	1	2	-	_

PC2. check for spills/leakages in various tasks/activities/processes	1	2	-	-
PC3. plug spills/leakages and escalate to appropriate authority if unable to rectify	1	2	-	-
PC4. carry out routine cleaning of tools, machines and equipment	1	2	_	_
Energy/electricity conservation practices	4	8	_	-
PC5. identify ways to optimize usage of electricity/energy in various tasks/activities/processes	1	2	_	_
PC6. check if the equipment/machine is functioning normally before commencing work and rectify wherever required	1	2	-	-
PC7. report malfunctioning (fumes/sparks/emission/vibration/noise) and lapse in maintenance of equipment	1	2	_	-
PC8. ensure electrical equipment and appliances are properly connected and turned off when not in use	1	2	-	-
Effective waste management/recycling practices	5	10	-	-
PC9. identify recyclable and non-recyclable, and hazardous waste generated	1	2	_	-
PC10. segregate waste into different categories	1	2	_	-
PC11. dispose non-recyclable waste appropriately	1	2	-	-
PC12. deposit recyclable and reusable material at identified location	1	2	_	-
PC13. follow processes specified for disposal of hazardous waste	1	2	_	-
NOS Total	13	26	_	-
Introduction to Employability Skills	1	1	-	-
PC1. understand the significance of employability skills in meeting the job requirements	-	-	-	-
Constitutional values – Citizenship	1	1	_	-
PC2. identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices	-	-	-	-

Becoming a Professional in the 21st Century	1	3	-	-
PC3. explain 21st Century Skills such as Self- Awareness, Behavior Skills, Positive attitude, self-motivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset etc.	-	-	-	-
Basic English Skills	2	3	_	-
PC4. speak with others using some basic English phrases or sentences	-	_	_	_
Communication Skills	1	1	-	-
PC5. follow good manners while communicating with others	-	_	_	-
PC6. work with others in a team	-	-	-	-
Diversity & Inclusion	1	1	-	-
PC7. communicate and behave appropriately with all genders and PwD	-	-	-	-
PC8. report any issues related to sexual harassment	-	-	-	-
Financial and Legal Literacy	3	4	-	-
PC9. use various financial products and services safely and securely	-	_	_	-
PC10. calculate income, expenses, savings etc.	-	-	-	-
PC11. approach the concerned authorities for any exploitation as per legal rights and laws	-	_	_	_
Essential Digital Skills	4	6	-	-
PC12. operate digital devices and use its features and applications securely and safely	-	-	-	-
PC13. use internet and social media platforms securely and safely	-	_	_	-
Entrepreneurship	3	5	-	-
PC14. identify and assess opportunities for potential business	-	-	-	_

PC15. identify sources for arranging money and associated financial and legal challenges	-	-	_	-
Customer Service	2	2	-	-
PC16. identify different types of customers	-	-	-	-
PC17. identify customer needs and address them appropriately	_	-	-	_
PC18. follow appropriate hygiene and grooming standards	-	-	_	-
Getting ready for apprenticeship & Jobs	1	3	-	-
PC19. create a basic biodata	-	-	-	-
PC20. search for suitable jobs and apply	-	-	-	-
PC21. identify and register apprenticeship opportunities as per requirement	_	_	_	_
NOS Total	20	30	_	-

Annexure - III QR Codes

Chapter No.	Unit No.	T opic Name	Page No.	Link to QR Code	QR Code
Chapter 1. Module 1 (Bridge Module)	Unit 1.1 Introduction to Food Processing Industry	1.1.1 Food Processing	13	https://www.yout ube.com/watch? v=J-2EiMVNtpM	Overview of Food Processing Industry FICSI Food SSC
Chapter 1. Module 1 (Bridge Module)	Unit 1.3 Roles and Responsibilities	1.3.1 Roles and Responsibiliti es of Food Safety Team Leader	13	https://www.yout ube.com/watch? v=5NE_wP229 Mo	Roles and Responsibilities
Chapter 1. Module 1 (Bridge Module)	Unit 1.2 The Importance of Continuous Food Safety Training for Food Safety Team Leaders 10	1.2.5 Cleaning and Sanitation	<u>13</u>	https://www.yout ube.com/watch? v=ZrMNr_JfmtE &list=PL_mT5D U_smK0LEkaw YoU3ktdKVurC m5xZ&index=11	Orientation Video
Chapter-2. Prepare for Spice Production	UNIT 2.2: Clean and Maintain Work Area, Machinery & Tools	2.2.1 - Cleaning and maintenance of the work area	52	https://www.yout ube.com/watch? v=VtSrqr0vfDE	Machinery used in Spice processing
Chapter-2. Prepare for Spice Production	Unit 2.1 - Planning for spice production	2.3.2 Obtaining and organizing production material	52	https://www.yout ube.com/watch? v=TZjU927RTZ U&t=16s	Spice processing Method

Chapter No.	Unit No.	T opic Name	Page	Link to QR	
			No.	Code	QR Code
Chapter – 3 Product Spice and Seasonings	Unit 3.2: Process for Preparing Different Spices and Seasonings	3.2.2 Curry Powder Manufacturin g Process	<u>113</u>	https://www.yout ube.com/watch? v=bUvyQLCIIeA	Demonstration on Red Chili Powder
Chapter – 3 Product Spice and Seasonings	Unit 3.2: Process for Preparing Different Spices and Seasonings	3.2.2 Curry Powder Manufacturin g Process	113	https://www.yout ube.com/watch? v=bUvyQLCIIeA	Demonstration on Sambhar Powder
Chapter – 3 Product Spice and Seasonings	Unit 3.2: Process for Preparing Different Spices and Seasonings	3.2.2 Curry Powder Manufacturin g Process	113	<u>https://www.yout ube.com/watch?</u> <u>v=-UVrJIt7qH4</u>	Demonstration on Ginger powder processing
Chapter – 3 Product Spice and Seasonings	Unit 3.2: Process for Preparing Different Spices and Seasonings	3.2.2 Curry Powder Manufacturin g Process	113	https://www.yout ube.com/watch? v=usYWxnR1Vf Q	Demonstration on Turmeric powder processing
Chapter – 3 Product Spice and Seasonings	Unit 3.2: Process for Preparing Different Spices and Seasonings	3.2.1 Whole Spices Manufacturin g Process	<u>113</u>	https://www.yout ube.com/watch? v=jTv_tpIEEzE	Demonstration on Large Cardamom powder processing

Chapter No.	Unit No.	T opic Name	Page No.	Link to QR Code	QR Code
Chapter – 3 Product Spice and Seasonings (FIC/N8515)		3.2.4.1 Problems Occurring During Spice Processing and Their Troubleshoo ng	113	https://www.yout ube.com/watch? v=Y5gdDIzXud Y	Spice adulteration
Chapter – 3 Product Spice and Seasonings (FIC/N8515)	Unit 3.3: Packaging and Labelling of Various Spice Products	3.1.3.6 Packaging and Storage	<u>113</u>	https://www.yout ube.com/watch? v=UjirN0yUhEQ	Packaging and Storage
Chapter 4- Ensuring Food Safety and Personal Hygiene (FIC/N9901)	Unit 4.2 - Schedule IV requirements of FSSAI	4.2.1 Schedule IV Requirement s of FSSAI	<u>146</u>	https://www.yout ube.com/watch? v=JSh4G2z3eC l	Introduction to schedule 4 Part1
Chapter 4- Ensuring Food Safety and Personal Hygiene (FIC/N9901)	Unit 4.2 - Schedule IV requirements of FSSAI	4.2.1 Schedule IV Requirement s of FSSAI	<u>146</u>	https://www.yout ube.com/watch? v=9Vjyi0GhVGA	Introduction to schedule 4 Part2
Chapter 4- Ensuring Food Safety and Personal Hygiene (FIC/N9901)		4.1.4 Storage (Importance of Storing Food at Specified Temperature)	<u>146</u>	https://www.yout ube.com/watch? v=shAjoTniul0	Basic storage and transportation
Emplo	yability Skills	1		<u>https://eskillindi</u> <u>a.org/NewEmplo</u> <u>yability</u>	









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