



# Model Curriculum

**QP Name: Pickle and Paste Making Technician**

**QP Code: FIC/Q0204**

**QP Version: 1.0**

**NSQF Level: 3**

**Model Curriculum Version: 1.0**

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## Training Parameters

|   |   |
|---|---|
| <b>Sector</b>   | Food Processing   |
| <b>Sub-Sector</b>                                       | Fruits and Vegetables   |
| <b>Occupation</b>                                       | Processing - Fruits & Vegetables  |
| <b>Country</b>  | India   |
| <b>NSQF Level</b>                                       | 3   |
| <b>Aligned to NCO/ISCO/ISIC Code</b>                    | NCO-2015/7514.1000  |
| <b>Minimum Educational Qualification and Experience</b> | 1. Class 10 passed<br>2. Class 8th passed with 2 years of relevant experience<br>3. NSQF Level 3 qualification certificate of food processing sector with 2 years of experience<br>4. Ability to read and write with 5 years of relevant experience |
| <b>Pre-Requisite License or Training</b>                | NA  |
| <b>Minimum Job Entry Age</b>                            | 16 years  |
| <b>Last Reviewed On</b>                                 | 24/02/2022  |
| <b>Next Review Date</b>                                 | 23/02/2025  |
| <b>NSQC Approval Date</b>                               | 24/02/2022  |
| <b>QP Version</b>                                       | 1.0   |
| <b>Model Curriculum Creation Date</b>                   | 20/12/2021  |
| <b>Model Curriculum Valid Up to Date</b>                | 24/02/2025  |
| <b>Model Curriculum Version</b>                         | 1.0   |
| <b>Minimum Duration of the Course</b>                   | 360 hours + 40 OJT  |
| <b>Maximum Duration of the Course</b>                   | 360 hours + 40 OJT  |

## Program Overview

This section summarizes the end objectives of the program along with its duration.

### Training Outcomes

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

- Prepare pickles, murabba and pastes
- Use various techniques for production of pickle, murraba and paste
- Use specialized equipment and tools to produce various types of pickles, murabba and pastes
- Perform sampling and evaluate the finished product on different parameters.
- Adhere to necessary health and safety practices to ensure food safety and personal hygiene
- Follow emergency procedures and infection control practices effectively
- Work with various organisational departments effectively
- Use resources at the workplace optimally

### Compulsory Modules

The table lists the modules and their duration corresponding to the Compulsory NOS of the QP.

| NOS and Module Details   | Theory Duration    | Practical Duration | On-the-Job Training Duration (Mandatory) | On-the-Job Training Duration (Recommended) | Total Duration     |
|--|--------------------|--------------------|--|--|--------------------|
| <b>Bridge Module</b>   | <b>36:00 Hours</b> | <b>12:00 Hours</b> | <b>00:00 Hours</b>                       | <b>00:00 Hours</b>                         | <b>48:00 Hours</b> |
| Module 1: Introduction to food processing sector and the job of 'Pickle and Paste making Technician' | 08:00 Hours        | 00:00 Hours        | 00:00 Hours                              | 00:00 Hours                                | 08:00 Hours        |
| Module 10: Employability and Entrepreneurship skills   | 28:00              | 12:00              | 00:00                                    | 00:00                                      | 40:00              |
| <b>FIC/N9026<br/>Prepare for production<br/>NOS Version No.: 1.0<br/>NSQF Level: 3</b>               | <b>12:00 Hours</b> | <b>32:00 Hours</b> | <b>00:00 Hours</b>                       | <b>00:00 Hours</b>                         | <b>44:00 Hours</b> |

|  |                     |                     |                    |                    |                     |
|--|---------------------|---------------------|--------------------|--------------------|---------------------|
| Module 2: Prepare for production   | 12:00 Hours         | 32:00 Hours         | 00:00 Hours        | 00:00 Hours        | 44:00 Hours         |
| <b>FIC/N0204</b><br>Carry out production of various types of pickles and pastes<br>NOS Version No.: 1.0<br>NSQF Level: 3 | <b>56:00 Hours</b>  | <b>136:00 Hours</b> | <b>40:00 Hours</b> | <b>00:00 Hours</b> | <b>226:00 Hours</b> |
| Module 3: Carry out production of various types of pickles and pastes  | 56:00 Hours         | 136:00 Hours        | 40:00 Hours        | 00:00 Hours        | 226:00 Hours        |
| <b>FIC/N9901: Implement health and safety practices at the workplace</b><br>NOS Version No.: 1.0<br>NSQF Level: 3        | <b>08:00 Hours</b>  | <b>16:00 Hours</b>  | <b>00:00 Hours</b> | <b>00:00 Hours</b> | <b>24:00 Hours</b>  |
| Module 4: Ensuring food safety and personal hygiene  | 04:00 Hours         | 8:00 Hours          | 00:00 Hours        | 00:00 Hours        | 12:00 Hours         |
| Module 5: Managing accidents and emergencies   | 04:00 Hours         | 08:00 Hours         | 00:00 Hours        | 00:00 Hours        | 12:00 Hours         |
| <b>FIC/N9902: Work effectively in an organization</b><br>NOS Version No.: 1.0<br>NSQF Level: 3                           | <b>08:00 Hours</b>  | <b>08:00 Hours</b>  | <b>00:00 Hours</b> | <b>00:00 Hours</b> | <b>16:00 Hours</b>  |
| Module 6: Work effectively in an organization  | 08:00 Hours         | 08:00 Hours         | 00:00 Hours        | 00:00 Hours        | 16:00 Hours         |
| <b>SGJ/N1702: Optimize resource utilization at workplace</b><br>NOS Version No.: 1.0<br>NSQF Level: 3                    | <b>12:00 Hours</b>  | <b>24:00 Hours</b>  | <b>00:00 Hours</b> | <b>00:00 Hours</b> | <b>36:00 Hours</b>  |
| Module 7: Material conservation  | 04:00 Hours         | 08:00 Hours         | 00:00 Hours        | 00:00 Hours        | 12:00 Hours         |
| Module 8: Energy/ electricity conservation   | 04:00 Hours         | 08:00 Hours         | 00:00 Hours        | 00:00 Hours        | 12:00 Hours         |
| Module 9: Waste management/recycling   | 04:00 Hours         | 08:00 Hours         | 00:00 Hours        | 00:00 Hours        | 12:00 Hours         |
| <b>Total Duration</b>  | <b>132:00 Hours</b> | <b>228:00 Hours</b> | <b>40:00 Hours</b> | <b>00:00 Hours</b> | <b>400:00 Hours</b> |

# Module Details

## Module 1: Introduction to food processing sector and the job of 'Pickle and Paste Making Technician'

### Bridge Module

#### Terminal Outcomes:

- Describe the food processing sector in brief
- Discuss the career opportunities available within the food processing sector

|   |  |
|---|--|
| <b>Duration:</b> 08:00  | <b>Duration:</b> 00:00                   |
| <b>Theory – Key Learning Outcomes</b>   | <b>Practical – Key Learning Outcomes</b> |
| <ul style="list-style-type: none"> <li>• Discuss the size and scope of the food processing industry in brief.</li> <li>• Discuss the future trends and career growth opportunities available for Pickle and Paste Making Technician in the food processing industry.</li> <li>• Summarise the key roles and responsibilities of 'Pickle and Paste Making Technician'.</li> <li>• List the various terminologies used in the process of making pickle and paste.</li> <li>• Discuss the various organisational procedures and processes for making pickles and pastes.</li> <li>• Discuss the standards to be followed for handling hazards and ensuring a clean work area.</li> </ul> |  |
| <b>Classroom Aids:</b>  |  |
| Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator's Guide, Participant's Handbook.  |  |
| <b>Tools, Equipment and Other Requirements</b>  |  |
| Nil   |  |

## Module 2: Prepare for production

### Mapped to FIC/N9026 v 1.0

#### Terminal Outcomes:

- Discuss the standard practices to be followed for production
- Demonstrate the tasks to be performed at the workplace for planning the production

|   |   |
|---|---|
| <b>Duration: 12:00</b>  | <b>Duration: 32:00</b>  |
| <b>Theory – Key Learning Outcomes</b>   | <b>Practical – Key Learning Outcomes</b>  |
| <ul style="list-style-type: none"> <li>• Discuss the significance of supervisors' work instructions with regards to the production requirements</li> <li>• Describe the relevance of planning and prioritizing the production work</li> <li>• State the importance of planning and arranging the estimated resource requirement</li> <li>• Estimate the resource requirement as per the production requirement</li> <li>• Discuss the capacity utilization of machinery with respect to the processing time, production order, and batch size for each product</li> <li>• List the materials and equipment used in cleaning and maintenance of the work area</li> <li>• List the sanitizers using in cleaning work area and machineries</li> <li>• Identify different kinds of waste material and comprehend the ways to dispose them safely</li> <li>• Specify the inspection procedure for inspecting the tools, equipment, and machinery used in the job</li> <li>• State the importance of reporting information such as faulty tools and equipment to the concerned authority</li> <li>• Explain the various factors to be considered while allocating responsibilities to the team</li> </ul> | <ul style="list-style-type: none"> <li>• Demonstrate how to analyze the process chart, product flow chart, formulation, chart, etc.</li> <li>• Exemplify the valuation of manpower and material requirement as per work requirement</li> <li>• Demonstrate how to estimate the resources requirements in terms of raw materials, packaging materials, machineries, and manpower</li> <li>• Show how to clean and sanitise the tools, equipment and the workplace</li> <li>• Exhibit the procedure to dispose the different kinds of waste material</li> <li>• Demonstrate the inspection procedure for the tools, equipment, and machinery</li> </ul> |
| <b>Classroom Aids:</b>  |   |

Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator's Guide, Participant's Handbook

#### **Tools, Equipment and Other Requirements**

Process related documents, list of raw materials, tools, equipment and machinery, organizational documents, and logbook.



## Module 3: Carry out production of various types of pickles and pastes

### Mapped to FIC/N0204 v 1.0

#### Terminal Outcomes:

- Discuss the process for preparing different types of pickles, pastes and murabba from fruits and vegetables
- Demonstrate the standard work practices followed to produce various types of pickles and pastes

|   |   |
|---|---|
| <b>Duration: 36:00</b>  | <b>Duration: 96:00</b>  |
| <b>Theory – Key Learning Outcomes</b>   | <b>Practical – Key Learning Outcomes</b>  |
| <ul style="list-style-type: none"> <li>• Recall the procedure of sampling to test the water quality and verifying the water level</li> <li>• Discuss the significance of drying line conveyor and sorting line conveyor</li> <li>• Describe the operation of a peeling machine</li> <li>• Explain the mechanism of peeling and slicing fruits and vegetables</li> <li>• Explain how to inspect the vegetables and fruits to identify spoilage</li> <li>• Elucidate the need of brine solution and fermentation process</li> <li>• State the importance and use of vinegar, brine and oil solution for pickle making</li> <li>• Describe the method of preparing pickle, paste and murabba using essential machines</li> <li>• Explain the packaging and postproduction activities</li> <li>• Describe the standard practices to replace defective material and to follow the process of disposing them safely</li> <li>• Discuss the impact of various kinds of hazardous material on the production process</li> </ul> | <ul style="list-style-type: none"> <li>• Show how to check the quality and level of water before washing the fruits and vegetables</li> <li>• Demonstrate the standard procedure for rinsing and drying the fruits and vegetables</li> <li>• Show how to use a peeling machine</li> <li>• Illustrate the process of peeling and slicing using appropriate machines</li> <li>• Exemplify the steps to prepare the brine solution and fermentation process</li> <li>• Demonstrate the process of preparing pickle, murabba and paste using necessary machines</li> <li>• Demonstrate how to analyse the quality of the finished product as per the standards of the organization</li> <li>• Demonstrate the various steps that are performed for packaging of the processed food</li> <li>• Illustrate the techniques for cleaning the machineries using recommended sanitizers following industry procedures such as cleaning clean-in-place, cleaning out of place</li> <li>• Apply standard practices to replace defective material and to follow the process of disposing them safely</li> <li>• Show how to dispose unwanted (such as broken, chipped or cracked equipment, spoiled material, etc.) and hazardous</li> </ul> |

|  |   |
|--|---|
|  | materials safely as per standard work practices |
| <b>Classroom Aids:</b>   |   |
| Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator's Guide, Participant's Handbook  |   |
| <b>Tools, Equipment and Other Requirements</b>   |   |
| Water tank, spraying system, drying line conveyor, sorting line conveyor, peeling machine, steam jacketed kettle, salinometer, crusher/mill, pulper, grinding machine, pickle making machine, container, filling machine, batch mixing cooker, raw ingredients, refractometer, storage tank, packaging machines, sterilized packing material, cartons, protective gloves, head caps, aprons, safety goggles, safety boots, mouth masks, various types of sanitisers and disinfectants, trash bins for waste material disposal, equipment for cleaning, procedural manual for reference |   |

## Module 4: Ensuring food safety and personal hygiene

### Mapped to FIC/N9901 v 1.0

#### Terminal Outcomes:

- Explain the ways to ensure food safety and personal hygiene at the workplace
- Demonstrate the steps to be followed for implementing good hygiene and manufacturing practices

| Duration: 04:00  | Duration: 08:00   |
|--|---|
| Theory – Key Learning Outcomes   | Practical – Key Learning Outcomes   |
| <ul style="list-style-type: none"> <li>• Define hazards and risks.</li> <li>• Recall the various types of health and safety equipment available in an organisation and the methods for obtaining them.</li> <li>• Discuss the organisational health and safety policies and procedures.</li> <li>• Discuss the relevant health and safety standards to be followed in the job as listed in 'The Food Safety and Standards Act, 2006'.</li> <li>• Explain the importance of wearing appropriate personal protective equipment (such as eye protection, hard hats, gloves apron, rubber boots, etc.) and ensuring personal hygiene at the workplace.</li> <li>• Elucidate the ways to prevent product contamination and cross contamination at the workplace.</li> <li>• Discuss the ways to handle items that can lead to allergic reactions in a retail environment.</li> <li>• State the importance of preventive health check-ups for ensuring personal hygiene.</li> <li>• State the importance of storing food at specified temperature.</li> <li>• Discuss the importance of sanitising self and the work area safely and appropriately.</li> <li>• Recall the ways to store the sanitising materials appropriately.</li> </ul> | <ul style="list-style-type: none"> <li>• Employ appropriate techniques to prevent product contamination and cross contamination.</li> <li>• Demonstrate the steps to be performed for implementing good manufacturing practices (GMP) in a retail environment.</li> <li>• Show how to treat injuries such as cuts, boils, skin infections and grazes appropriately.</li> <li>• Apply suitable methods for disinfecting the work area and equipment thoroughly.</li> <li>• Demonstrate how to wash hands and use alcohol-based sanitisers appropriately.</li> <li>• Show how to wear personal protective equipment such as gloves, hairnets, masks, ear plugs, goggles, shoes etc. properly ensuring adequate protection.</li> <li>• Prepare a sample report consisting of information such as illness to self and others as per organisational practice.</li> <li>• Roleplay a situation on how to communicate with the supervisor for reporting illness of self and others.</li> </ul> |

**Classroom Aids:**

Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator's Guide, Participant's Handbook

**Tools, Equipment and Other Requirements**

Gloves, hair net, shoe cover, soap dispenser, hand sanitizer, ear plugs, masks, aprons/lab coats eye protection, hard hats, gloves, rubber boots, etc.

## Module 5: Managing accidents and emergencies

### Mapped to FIC/N9901 v1.0

#### Terminal Outcomes:

- List the various types of accidents and emergencies that can arise at the workplace and the ways to address them
- Demonstrate the steps to be followed to implement emergency and evacuation procedures effectively

| Duration: 04:00  | Duration: 08:00  |
|--|--|
| Theory – Key Learning Outcomes   | Practical – Key Learning Outcomes  |
| <ul style="list-style-type: none"> <li>• List the various types of health and safety hazards present in the environment.</li> <li>• Discuss the possible causes of risk, hazard or accident at the workplace.</li> <li>• Elucidate the standard practices and precautions used to control and prevent risks, hazards and accidents at the workplace.</li> <li>• Discuss the dangers associated with the use of electrical and other equipment.</li> <li>• State the importance of using protective equipment and clothing for specific tasks and work conditions.</li> <li>• Discuss the role of organisational protocols in preventing accidents and hazards.</li> <li>• Recall the preventive and remedial actions to be taken in the case of exposure to toxic materials at the workplace.</li> <li>• Discuss the various causes of fire and ways to prevent them.</li> <li>• Elaborate the steps to use different types of fire extinguishers.</li> <li>• Explain the procedure to provide artificial respiration and cardio-pulmonary resuscitation (CPR) to the affected.</li> <li>• Summarise the rescue techniques to be followed at times of fire hazard.</li> <li>• Discuss the significance of various types of hazard and safety signs.</li> </ul> | <ul style="list-style-type: none"> <li>• Apply appropriate techniques to deal with hazards safely and appropriately.</li> <li>• Demonstrate the use of various types of fire extinguishers effectively.</li> <li>• Demonstrate appropriate ways to respond to an accident situation or medical emergency promptly and appropriately.</li> <li>• Demonstrate the steps to be followed for providing artificial respiration and cardio-pulmonary resuscitation (CPR) in various instances (e.g. cardiac arrest).</li> <li>• Perform the steps to be followed during emergency and evacuation procedure.</li> <li>• Demonstrate the procedure of freeing a person from electrocution.</li> <li>• Show how to administer appropriate first aid to victims in case of cuts, bleeding, burns, choking, electric shock, poisoning etc.</li> </ul> |

|  |  |
|--|--|
| <ul style="list-style-type: none"> <li>• Discuss the workplace emergency and evacuation procedures.</li> <li>• Elaborate the type of first-aid treatment to be offered at times of shock, electrical shock, bleeding, breaks to bones, minor burns, resuscitation, poisoning, eye injuries, etc.</li> <li>• Discuss about the potential injuries and ill health conditions that are caused due to incorrect manual handling practices.</li> <li>• List the precautions to be taken while lifting and carrying materials in a food retail environment.</li> </ul> |  |
| <b>Classroom Aids:</b>   |  |
| Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator's Guide, Participant's Handbook  |  |
| <b>Tools, Equipment and Other Requirements</b>   |  |
| Helmet, gloves, rubber mat, ladder, neon tester, leather or asbestos gloves, flame proof aprons, flame proof overalls buttoned to neck, cuff less (without folds) trousers, reinforced footwear, helmets/hard hats, cap and shoulder covers, ear defenders/plugs, safety boots, knee pads, particle masks, glasses/goggles/visors, hand and face shields, machine guards, residual current Devices, shields, dust sheets, respirator.  |  |

## Module 6: Work effectively in an organization

### Mapped to FIC/N9902 v 1.0

#### Terminal Outcomes:

- State the importance of proper communication and teamwork at the workplace
- Roleplay a situation to communicate with others effectively

| Duration: 08:00  | Duration: 08:00  |
|--|--|
| Theory – Key Learning Outcomes   | Practical – Key Learning Outcomes  |
| <ul style="list-style-type: none"> <li>• Discuss the applicable organisational quality procedures and processes for working effectively in a team.</li> <li>• Elucidate the legislations, standards, policies, and procedures followed in the organization relevant to employment, behaviour, harassment, discrimination, and performance conditions.</li> <li>• State the importance of well-defined reporting structure in an organisation.</li> <li>• List the various types of inter-dependent functions applicable in the job.</li> <li>• Discuss the different types of harassment and discrimination based on gender, disability, caste, religion, and culture.</li> <li>• List the key factors that aid in prioritising tasks.</li> <li>• Discuss the components of effective communication and its importance at the workplace.</li> <li>• State the impact of poor communication on the employee, the employer, and the customer.</li> <li>• State the importance of teamwork in organizational and individual success.</li> <li>• Discuss the importance of ethics and discipline for professional success.</li> <li>• Explain the ways to address grievances appropriately and effectively.</li> </ul> | <ul style="list-style-type: none"> <li>• Roleplay a situation on how to obtain information, seek clarifications, reciprocate understanding and provide information accurately and clearly.</li> <li>• Roleplay a situation on how to use inclusive language (verbal, non-verbal and written) that is gender, disability and culturally sensitive while interacting with others.</li> <li>• Show how to consult and assist others to maximize effectiveness and efficiency at work.</li> <li>• Dramatise a situation to show how to escalate problems and grievances beyond own scope to the concerned authority.</li> <li>• Roleplay a situation on how to take appropriate action to resolve conflicts at the workplace.</li> <li>• Roleplay a situation on how to report incidents of harassment and discrimination to appropriate authority.</li> </ul> |

- Discuss the importance of managing interpersonal conflicts effectively and ways to do so.
- List the different types of disabilities and the challenges faced by persons with disability (PwD).
- Discuss the applicable laws, acts and provisions defined for PwD by the statutory bodies.
- State the importance of gender sensitivity and equality.
- Discuss the applicable legislations, grievance redressal mechanisms, and penalties against harassment at the workplace.
- State the importance of transacting with others without personal bias.

**Classroom Aids:**

Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator's Guide, Participant's Handbook

**Tools, Equipment and Other Requirements**

Nil



## Module 7: Material Conservation

### Mapped to SGJ/N1702 v 1.0

#### Terminal Outcomes:

- Discuss optimal usage of material including water in various tasks/activities/processes

|   |   |
|---|---|
| <b>Duration:</b> 04:00  | <b>Duration:</b> 08:00  |
| <b>Theory – Key Learning Outcomes</b>   | <b>Practical – Key Learning Outcomes</b>  |
| <ul style="list-style-type: none"> <li>• List the types of hazards, risks and threats associated with handling different materials.</li> <li>• Discuss the role of workstation layout, electrical and thermal equipment used in the material conservation.</li> <li>• Discuss organisational procedures for minimising waste.</li> <li>• Elucidate practices of efficient and inefficient management and utilization of material and water at the workplace.</li> <li>• Discuss the ways to manage material and water usage at work effectively.</li> </ul> | <ul style="list-style-type: none"> <li>• Show how to check for spills and leakages in various materials applicable in the job.</li> <li>• Demonstrate how to plug the spills and leakages appropriately.</li> <li>• Roleplay a situation on how to escalate any issues related to repair of spills and leakages to the concerned authority effectively.</li> <li>• Demonstrate the standard practices to be followed for cleaning tools, machines and equipment effectively.</li> </ul> |
| <b>Classroom Aids:</b>  |   |
| Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator's Guide, Participant's Handbook   |   |
| <b>Tools, Equipment and Other Requirements</b>  |   |
| Materials and tools and equipment used at work  |   |

## Module 8: Energy/electricity conservation

### Mapped to SGJ/N1702 v 1.0

#### Terminal Outcomes:

- Discuss optimal usage of energy/electricity

|  |   |
|--|---|
| <b>Duration:</b> 04:00   | <b>Duration:</b> 08:00  |
| <b>Theory – Key Learning Outcomes</b>  | <b>Practical – Key Learning Outcomes</b>  |
| <ul style="list-style-type: none"> <li>• Define electricity.</li> <li>• Discuss the basics of electricity.</li> <li>• List the energy efficient devices that are used in the job.</li> <li>• Discuss the ways to identify electrical problems that can arise during work.</li> <li>• Discuss the standard practices to be followed for conserving electricity in the job.</li> <li>• State the impact of improperly connected electrical equipment and appliances on the tasks being performed.</li> </ul> | <ul style="list-style-type: none"> <li>• Apply suitable techniques to check the equipment/machinery for desired level of functioning.</li> <li>• Employ appropriate methods to rectify faulty equipment/machinery safely.</li> <li>• Roleplay a situation on how to report equipment faults and maintenance lapses to the concerned personnel effectively.</li> </ul> |
| <b>Classroom Aids:</b>   |   |
| Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator's Guide, Participant's Handbook  |   |
| <b>Tools, Equipment and Other Requirements</b>   |   |
| Energy saving devices  |   |

## Module 9: Waste management/recycling

### Mapped to SGJ/N1702 v 1.0

#### Terminal Outcomes:

- Discuss the importance of minimal waste generation
- Demonstrate how to dispose waste as per industry approved standards

|  |   |
|--|---|
| <b>Duration:</b> 04:00   | <b>Duration:</b> 08:00  |
| <b>Theory – Key Learning Outcomes</b>  | <b>Practical – Key Learning Outcomes</b>  |
| <ul style="list-style-type: none"> <li>• List the various types of recyclable, non-recyclable, and hazardous waste.</li> <li>• State the significance of different coloured dustbins.</li> <li>• List the different types of waste to be segregated.</li> <li>• State the importance of waste management.</li> <li>• Discuss the standard methods for waste disposal.</li> <li>• List the sources of pollution.</li> <li>• Discuss the ways to minimise various types of pollution.</li> </ul> | <ul style="list-style-type: none"> <li>• Demonstrate the standard practices to be followed for segregating waste into respective categories.</li> <li>• Show how to dispose non-recyclable waste appropriately and safely.</li> <li>• Demonstrate the standard practice for depositing recyclable and reusable materials at designated place.</li> <li>• Show how to dispose hazardous waste safely and appropriately.</li> </ul> |
| <b>Classroom Aids:</b>   |   |
| Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator's Guide, Participant's Handbook  |   |
| <b>Tools, Equipment and Other Requirements</b>   |   |
| Non-recyclable, recyclable waste bins  |   |

## Module 10: Employability and Entrepreneurship skills

### Bridge Module

#### Terminal Outcomes:

- Describe the traits of individual at workplace
- Demonstrate apply employability and entrepreneurship skills at workplace

|   |  |
|---|--|
| <b>Duration: 28:00</b>  | <b>Duration: 12:00</b>   |
| <b>Theory – Key Learning Outcomes</b>   | <b>Practical – Key Learning Outcomes</b>   |
| <ul style="list-style-type: none"> <li>• Discuss own strengths and weaknesses and analyse the gaps to ensure continuous improvement.</li> <li>• Discuss the measures to be undertaken to utilise time effectively thereby achieving maximum productivity.</li> <li>• List the characteristics of innovative individuals</li> <li>• List the levels of Maslow Hierarchy of needs</li> <li>• List the traits of effective team</li> <li>• Discuss tips for stress management</li> <li>• Discuss the importance of good work ethics</li> <li>• Discuss how to manage an enterprise</li> <li>• Describe how to plan effective strategies for solving problems and improving work culture within the team.</li> <li>• List the various types of digital marketing techniques.</li> <li>• Discuss the types and importance of e-commerce in promoting businesses.</li> <li>• List the various types of online banking services being used widely.</li> <li>• Discuss the procedure to apply for bank finances</li> <li>• List the elements of a proposal to attract future business opportunities and prospective clients.</li> <li>• Explain how to conduct entrepreneurial programs to identify business opportunities, generate employment and increase clientele.</li> <li>• Understand the make in India campaign</li> <li>• Discuss the importance of Swachh Bharat Abhiyan</li> <li>• Understand the importance of entrepreneurship</li> </ul> | <ul style="list-style-type: none"> <li>• Show how to analyse a situation to identify gaps for improving the work process.</li> <li>• Demonstrate the procedure to plan the time taken to perform various tasks effectively.</li> <li>• Describe how market research is carried out</li> <li>• Role play the characteristics of an effective entrepreneur and leader</li> <li>• Demonstrate on how to identify new business opportunities</li> <li>• Prepare a sample plan to solve problems and improve productivity at the workplace.</li> <li>• Demonstrate the procedure to operate a computer for digital marketing, e-commerce, branding, etc.</li> <li>• Show how to use services such as NEFT, IMPS, UPI, RTGS for online banking.</li> </ul> |

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>• Describe the traits of successful entrepreneur</li> <li>• List the types of enterprises</li> <li>• Understand the importance of effective speaking and listening</li> <li>• Discuss the importance of problem solving</li> <li>• Discuss how to deal with failures</li> <li>• Describe the core keys of marketing</li> <li>• Discuss ways to manage risks at workplace</li> </ul> |  |
|--|--|

**Classroom Aids:**

White board/Chart papers, marker.

**Tools, Equipment and Other Requirements**

NIL

## Annexure

### Trainer Requirements

| Trainer Prerequisites             |   |                              |                 |                     |                 |         |
|-----------------------------------|---|------------------------------|-----------------|---------------------|-----------------|---------|
| Minimum Educational Qualification | Specialization  | Relevant Industry Experience |                 | Training Experience |                 | Remarks |
|                                   |   | Years                        | Specialization  | Years               | Specialization  |         |
| B.Sc or graduate/B.Tech/BE        | Food technology or food engineering   | 3                            | Food processing | 1                   | Food processing |         |
| M.Sc/M.Tech/ME                    | Food technology or food engineering   | 2                            | Food processing | 1                   | Food processing |         |
| Diploma /certificate course       | (Food Technology / Food Engineering /packaging/Home science, or allied sector | 4                            | Food processing | 1                   | Food processing |         |

| Trainer Certification  |  |
|--|--|
| Domain Certification   | Platform Certification   |
| Certified for Job Role: "Pickle and Paste making Technician" mapped to QP: "FIC/Q0204, v1.0". Minimum accepted score is 80%. | Recommended that the Trainer is certified for the Job Role: "Trainer", mapped to the Qualification Pack: "MEP/Q2601". Minimum accepted score as per MEPSC guidelines is 80%. |

## Assessor Requirements

| Assessor Prerequisites            |  |                              |                 |                                |                 |         |
|-----------------------------------|--|------------------------------|-----------------|--------------------------------|-----------------|---------|
| Minimum Educational Qualification | Specialization                               | Relevant Industry Experience |                 | Training/Assessment Experience |                 | Remarks |
|                                   |  | Years                        | Specialization  | Years                          | Specialization  |         |
| M.Sc/M.Tech/ME                    | Food technology or food engineering          | 2                            | Food processing | 1                              | Food processing |         |
| B.Sc or graduate/B.Tech/BE        | Food technology/ Home Science                | 3                            | Food processing | 2                              | Food processing |         |
| Diploma                           | Hotel management/ Food Science/ Home Science | 4                            | Food processing | 2                              | Food processing |         |

| Assessor Certification   |  |
|--|--|
| Domain Certification   | Platform Certification                                     |
| Certified for Job Role: "Pickle and Paste making Technician" mapped to QP: "FIC/Q0204, v1.0". Minimum accepted score is 80%. | "Trainer", "MEP/Q2601, V1.0" with a scoring of minimum 80% |

## Assessment Strategy

This section includes the processes involved in identifying, gathering and interpreting information to evaluate the learner on the required competencies of the program.

Assessment will be based on the concept of Independent Assessors empanelled with Assessment Agencies, identified, selected, trained and certified on Assessment techniques. These assessors would be aligned to assess as per the laid down criteria.

Assessment Agency would conduct assessment only at the training centres of Training Partner or designated testing centers authorized by FICSI.

Ideally, the assessment will be a continuous process comprising of three distinct steps:

A. Mid- term assessment

B. Term / Final Assessment

Each National Occupational Standard (NOS) in the respective QPs will be assigned weightage. Therein each Performance Criteria in the NOS will be assigned marks for theory and / or practical based on relative importance and criticality of function.

This will facilitate preparation of question bank / paper sets for each of the QPs. Each of these papers sets / question bank so created by the Assessment Agency will be validated by the industry subject matter experts through FICSI, especially with regard to the practical test and the defined tolerances, finish, accuracy etc.

The following tools are proposed to be used for final assessment:

- i. Written Test: This will comprise of (i) True / False Statements (ii) Multiple Choice Questions (iii) Matching Type Questions. Online system for this will be preferred.
- ii. Practical Test: This will comprise a test job to be prepared as per project briefing following appropriate working steps, using necessary tools, equipment and instruments. Through observation it will be possible to ascertain candidate's aptitude, attention to details, quality consciousness etc. The end product will be measured against the pre-decided MCQ filled by the Assessor to gauge the level of his skill achievements.
- iii. Structured Interview: This tool will be used to assess the conceptual understanding and the behavioral aspects as regards the job role and the specific task at hand.



## References

## Glossary

| Term                         | Description   |
|------------------------------|---|
| <b>Declarative Knowledge</b> | Declarative knowledge refers to facts, concepts and principles that need to be known and/or understood in order to accomplish a task or to solve a problem.   |
| <b>Key Learning Outcome</b>  | Key learning outcome is the statement of what a learner needs to know, understand and be able to do in order to achieve the terminal outcomes. A set of key learning outcomes will make up the training outcomes. Training outcome is specified in terms of knowledge, understanding (theory) and skills (practical application). |
| <b>OJT (M)</b>               | On-the-job training (Mandatory); trainees are mandated to complete specified hours of training on site  |
| <b>OJT (R)</b>               | On-the-job training (Recommended); trainees are recommended the specified hours of training on site   |
| <b>Procedural Knowledge</b>  | Procedural knowledge addresses how to do something, or how to perform a task. It is the ability to work, or produce a tangible work output by applying cognitive, affective or psychomotor skills.  |
| <b>Training Outcome</b>      | Training outcome is a statement of what a learner will know, understand and be able to do <b>upon the completion of the training</b> .  |
| <b>Terminal Outcome</b>      | Terminal outcome is a statement of what a learner will know, understand and be able to do <b>upon the completion of a module</b> . A set of terminal outcomes help to achieve the training outcome.   |

## Acronyms and Abbreviations

| Term | Description                             |
|------|---|
| QP   | Qualification Pack                      |
| NSQF | National Skills Qualification Framework |
| NSQC | National Skills Qualification Committee |
| NOS  | National Occupational Standards         |
| FIFO | First In First Out                      |
| FEFO | First Expire First Out                  |
| GMP  | Good Manufacturing Practices            |
| GHP  | Good Hygiene Practices                  |
| CPR  | Cardiopulmonary Resuscitation           |