



# Model Curriculum

**QP Name: Assistant Sorter and Grader - Fruits and Vegetables**

**QP Code: FIC/Q0108**

**Version: 5.0**

**NSQF Level: 3.0**

**Model Curriculum Version: 5.0**

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## Training Parameters

<b>Sector</b>	Food Processing
<b>Sub-Sector</b>	Fruits and Vegetables
<b>Occupation</b>	Sorting and Grading
<b>Country</b>	India
<b>NSQF Level</b>	3
<b>Aligned to NCO/ISCO/ISIC Code</b>	NCO -2015/7514.9900
<b>Minimum Educational Qualification and Experience</b>	Grade 10 OR 8th-grade pass with 3-year of experience in food processing OR Previous relevant Qualification of NSQF Level 2.0 with 3-year of experience in food processing OR Previous relevant qualification of NSQF Level 2.5 with 1.5-year of experience in food processing
<b>Pre-Requisite License or Training</b>	NA
<b>Minimum Job Entry Age</b>	16 Years
<b>Last Reviewed On</b>	22-10-2024
<b>Next Review Date</b>	21-10-2027
<b>NSQC Approval Date</b>	22-10-2024
<b>QP Version</b>	5.0
<b>Model Curriculum Creation Date</b>	30-08-2024
<b>Model Curriculum Valid Up to Date</b>	21-10-2027
<b>Model Curriculum Version</b>	5.0
<b>Minimum Duration of the Course</b>	300 Hours
<b>Maximum Duration of the Course</b>	300 Hours

## Program Overview

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

### Training Outcomes

At the end of the program, the learner should have acquired the listed knowledge and skills to:

- Explain how to prepare to perform various tasks prior to production in the food processing industry.
- Show how to sort and grade various agricultural produce.
- Elucidate the process of packing and storing the produce before its transportation.
- Discuss the basic health and safety practices to be followed at a food processing workplace.
- Discuss the Employability and Entrepreneurship Skills.

### Compulsory Modules

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

NOS and Module Details	Theory Duration (Hours)	Practical Duration (Hours)	On-the-Job Training Duration (Mandatory) (Hours)	On-the-Job Training Duration (Recommended) (Hours)	Total Duration (Hours)
<b>FIC/N9026: Prepare for Production</b> <b>NOS Version No.: 1.0</b> <b>NSQF Level: 3.0</b>	20:00	40:00	00:00	00:00	60:00
Module 2: Carry Out Prepare for Production	20:00	40:00	00:00	00:00	60:00
<b>FIC/N0129: Sort, Grade, Pack and Store the Produce</b> <b>NOS Version No.: 3.0</b> <b>NSQF Level: 3.0</b>	30:00	90:00	60:00	00:00	180:00
Module 1: Introduction to the Sector and the Job Role of an Assistant Sorter and Grader - Fruits and Vegetables	05:00	00:00	00:00	00:00	05:00
Module 3: Carry Out Sorting and Grading of the Produce	15:00	55:00	30:00	00:00	100:00
Module 4: Carry Out Packing, Storing and Post-Production Activities	10:00	35:00	30:00	00:00	75:00
<b>FIC/N9906: Apply food safety guidelines in Food Processing</b> <b>NOS Version No.: 1.0</b> <b>NSQF Level: 2</b>	10:00	20:00	00:00	00:00	30:00

Module 5: Implement Personal Hygiene and Good Manufacturing Practices	05:00	10:00	00:00	00:00	15:00
Module 6: Apply food safety practices at workplace	05:00	10:00	00:00	00:00	15:00
<b>DGT/VSQ/N0101:</b> <b>Employability Skills (30 Hours)</b> <b>NOS Version No.: 1.0</b> <b>NSQF Level: 2</b>	<b>30:00</b>	<b>00:00</b>	<b>00:00</b>	<b>00:00</b>	<b>30:00</b>
Module 7: Employability Skills (30 Hours)	30:00	00:00	00:00	00:00	30:00
<b>Total Duration</b>	<b>90:00</b>	<b>150:00</b>	<b>60:00</b>	<b>00:00</b>	<b>300:00</b>

## Module Details

### Module 1: Introduction to Food Processing Sector and job role of an Assistant Sorter and Grader - Fruits and Vegetables

*Mapped to FIC/N0129, v3.0*

#### Terminal Outcomes:

- Describe the food processing sector in brief.
- Discuss the career opportunities available to the individual within the food processing sector.
- Explain importance of training program and job role of an Assistant Sorter and Grader - Fruits and Vegetables.

<b>Duration (in hours): 05:00</b>	<b>Duration (in hours): 00:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Define the term ‘food processing’.</li> <li>• Discuss the size and scope of the food processing industry in brief.</li> <li>• List the various sub sectors of food processing industry.</li> <li>• Explain the objective of training individuals for the job of an Assistant Sorter and Grader - Fruits and Vegetables.</li> <li>• Discuss the future trends and career growth opportunities available to the Assistant Sorter and Grader - Fruits and Vegetables.</li> <li>• Summarise key role &amp; responsibilities of an Assistant Sorter and Grader - Fruits and Vegetables.</li> <li>• List different methods used for sorting and grading of fruits and vegetables.</li> <li>• State the importance of ensuring a tidy and a safe workplace.</li> <li>• List the various sub-units within a fruits and vegetables processing unit.</li> <li>• List the sequence of operations to be performed in the job.</li> </ul>	
<b>Classroom Aids</b>	
Training Kit - Facilitator’s Guide, Participant’s Handbook, Presentations and Software, Whiteboard, Marker, Projector, Laptop, Video Films	
<b>Tools, Equipment and Other Requirements</b>	

Nil

## Module 2: Carry Out Preparation for Production

*Mapped to FIC/N9026, v1.0*

### Terminal Outcomes:

- Discuss the standard practices to be followed to plan for production.
- Demonstrate the tasks to be performed to prepare for the production process.

Duration (in hours): 20:00	Duration (in hours): 40:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> <li>• Discuss how to plan and prioritize the tasks to be performed.</li> <li>• State the importance of obtaining work instructions from supervisor to plan the work process.</li> <li>• State the importance of process chart, product flow chart, formulation, chart, etc. to obtain required information.</li> <li>• List the materials, equipment and manpower required in the selection of fruits and vegetables.</li> <li>• List the key considerations to prepare the work schedule.</li> <li>• Identify the resource requirements as per the production schedule.</li> <li>• Explain how to utilise the machine capacity of the machinery involved with respect to the processing time, production order and batch size for each product.</li> <li>• List the chemical agents, sanitisers and methods used to clean the work area.</li> <li>• Identify different kinds of waste material and comprehend the ways to dispose them safely.</li> <li>• Describe how to carry out inspection of tools, equipment, and machinery to be used in the job.</li> <li>• Discuss the policies and procedures to be followed to prepare for the work process.</li> <li>• State the importance of inspecting tools, equipment and machinery on a timely basis.</li> </ul>	<ul style="list-style-type: none"> <li>• Show how to prepare a plan to carry out various tasks as required in the job.</li> <li>• Show how to prepare sample estimates for resource requirements to carry out the tasks.</li> <li>• Demonstrate method to be followed for cleaning (CIP, COP etc.) and maintaining a clean work area.</li> <li>• Demonstrate the use of different tools and machineries used in the selection of fruits and vegetables.</li> <li>• Show how to identify, label and store different chemicals in food processing unit safely.</li> <li>• Demonstrate with help of roleplay a situation on how to allot work and responsibilities to the team and confirm that they have understood.</li> <li>• Demonstrate the procedure to be followed for disposing the waste material (wet, dry, plastic, packaging material, food waste and glass waste) as per environmentally safe practices.</li> <li>• Show how to inspect the tools, equipment and machinery thoroughly for production.</li> <li>• Demonstrate how to receive and organize the work materials appropriately.</li> </ul>
<b>Classroom Aids</b>	



Training Kit - Facilitator's Guide, Participant's Handbook, Presentations and Software, Whiteboard, Marker, Projector, Laptop, Video Films

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

Process-related documents, list of raw materials, tools, equipment and machinery, organizational documents, logbook, pH Meter, Thermometer, Weighing balance (Digital)

## Module 3: Carry Out Sorting and Grading of the Produce

*Mapped to FIC/N0129, v3.0*

### Terminal Outcomes:

- Explain how to wash and dry the produce.
- Describe the process of sorting and grading the produce.

Duration (in hours): 15:00	Duration (in hours): 55:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> <li>• Explain the basics of food microbiology.</li> <li>• Describe the laws and regulations for food handling, safety, packaging, and labelling.</li> <li>• Explain the APEDA and AgMark standards for agricultural and processed food products.</li> <li>• Describe the maturity index of different fruits and vegetables.</li> <li>• Discuss the factors affecting the maturity of fruits and vegetables.</li> <li>• Discuss the variety, characteristics, and quality of different types of fruits and vegetables.</li> <li>• Explain the washing process and chemicals used for washing produce.</li> <li>• Elucidate the benefits and process of Ozone washing of fruits and vegetables.</li> <li>• Explain the pack house handling procedures for produce.</li> <li>• Describe new technologies like air blowing, cameras, optical sorters, NIR spectroscopy, laser, and X-ray sorting machines.</li> <li>• Discuss the different grade designations of agricultural produce according to AgMark.</li> <li>• Describe the use and maintenance of machinery for sorting and grading produce.</li> <li>• Elucidate methods to identify and handle rejected produce.</li> <li>• Discuss the physical and sensory characteristics of agricultural produce.</li> </ul>	<ul style="list-style-type: none"> <li>• Show how to retrieve agricultural produce from the warehouse/cold storage.</li> <li>• Demonstrate how to check the quality of produce based on physical and sensory parameters.</li> <li>• Show how to set controls for the float/water tank and pump water to the required level for washing produce.</li> <li>• Show how to set conveyor controls, such as speed and height, to lift the agricultural produce from the floor, racks, or containers.</li> <li>• Demonstrate how to dump the produce in the float/water tank to remove impurities.</li> <li>• Show how to adjust the pressure of the spraying system to remove chlorine from the surface of fruits and vegetables.</li> <li>• Demonstrate how to set appropriate controls for the drying line conveyor and pass the washed fruits and vegetables through the drying tunnel.</li> <li>• Show how to set appropriate controls for the brushing conveyor and clean the produce unsuitable for water treatment.</li> <li>• Demonstrate how to set the appropriate controls for the dryer and dry the produce.</li> <li>• Show how to apply waxing treatment depending on the type of produce to reduce water loss and improve appearance.</li> <li>• Show how to identify and remove severely damaged produce.</li> </ul>

<ul style="list-style-type: none"> <li>• Describe different grades of agricultural produce.</li> <li>• Explain the process of diluting and concentrating chlorine water and how to use it in the recommended quantity in the water to kill pathogenic and non-pathogenic micro-organisms.</li> <li>• Describe how to operate and control the conveyor belt, brushing conveyor, and grading line.</li> <li>• Discuss the optimum use of a high-pressure spray system and dryer.</li> <li>• Explain the parameters for quality assessment during the sorting and grading of fruits and vegetables.</li> <li>• Describe the process of waxing fruits and vegetables.</li> <li>• Explain how to calibrate an electronic colour sorter.</li> <li>• Discuss the process of randomized and systematic sampling of produce.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate how to set the mesh inside the mechanical sieving machine to separate unwanted material from the produce.</li> <li>• Show how to remove dry foliage from onion and garlic bulbs and sort them by size using measurement rings of different diameters.</li> <li>• Demonstrate how to calibrate the electronic colour sorter to sort produce based on colour and record the readings.</li> <li>• Show how to grade produce based on diameter, length, weight, and size using line conveyors with mesh screens, diverging belts, rollers, or weight-sensitive trays.</li> <li>• Demonstrate how to coordinate the analysis of quality parameters by sending samples to the quality lab, as required.</li> <li>• Show how to collect sorted and graded produce by placing baskets, tubs, or crates below the discharge outlets of each lane or machine.</li> <li>• Demonstrate how to identify and report malfunctions or discrepancies to the supervisor and take appropriate corrective action, as instructed.</li> <li>• Show how to carry containers with sorted and graded produce to the packaging area safely.</li> </ul>
<b>Classroom Aids</b>	
Training Kit - Facilitator's Guide, Participant's Handbook, Presentations and Software, Whiteboard, Marker, Projector, Laptop, Video Films	
<b>Tools, Equipment and Other Requirements</b>	
Pump, Water, Spray System, Sorting Line Conveyor, Grading Line Conveyor, Electronic Sorting Machine, Protective Gloves, Head Caps, Aprons, Safety Goggles, Safety Boots, Mouth Masks, Sanitizer, Food Safety Manual, Sorting Table, Fruits and Vegetables Grading Machine	

## Module 4: Carry Out Packing, Storing and Post-Production Activities

*Mapped to FIC/N0129, v3.0*

### Terminal Outcomes:

- Discuss how to pack and store the produce.
- Elucidate the steps to carry out post-production activities.

Duration (in hours): 10:00	Duration (in hours): 35:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> <li>• Elucidate the importance of labelling produce and the information included on labels.</li> <li>• Describe different packaging materials and the operation of packing machines for fresh produce.</li> <li>• Explain the preventive maintenance of relevant tools, equipment, and machinery.</li> <li>• Explain the methods for organizing pallets in the storage area.</li> <li>• Discuss storage procedures for incoming produce, packaging materials, and packed produce.</li> <li>• Describe the safe use and storage of different types of disinfectants.</li> <li>• Explain relevant cleaning practices such as Clean-in-Place (CIP) and Clean-out-of-Place (COP).</li> <li>• Elucidate the elements of Good Manufacturing Practices (GMP) and Good Hygiene Practices (GHP) for sorting and grading produce.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate how to carry out primary and secondary packaging of the produce, as applicable.</li> <li>• Show how to label the produce with necessary information according to applicable FSSAI guidelines.</li> <li>• Demonstrate how to store packed produce in a clean and hygienic storage area, maintaining recommended temperature and humidity.</li> <li>• Show how to use appropriate storage accessories, such as cartons, crates, gunny bags, and mesh, to store packed produce.</li> <li>• Demonstrate how to follow organizational procedures to dispatch packed produce to their destination using a suitable transportation method.</li> <li>• Show how to clean and disinfect the work area, tools, equipment, and machinery using the recommended cleaning agents.</li> <li>• Demonstrate how to carry out basic repair and maintenance of the tools, equipment, and machinery.</li> <li>• Show how to ensure periodic maintenance of the tools, equipment, and machinery according to the manufacturer's instructions.</li> <li>• Show how to carry out appropriate documentation concerning the sorting, grading, packing and storage of fruits and vegetables.</li> </ul>
<b>Classroom Aids</b>	

Training Kit - Facilitator's Guide, Participant's Handbook, Presentations and Software, Whiteboard, Marker, Projector, Laptop, Video Films

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

Packaging Machine, Protective Gloves, Head Caps, Aprons, Safety Goggles, Safety Boots, Mouth Masks, Sanitizer, Food Safety Manual, Refrigerator, Fruit tray, Sealing Machine, Shrink Wrap Machine

## Module 5: Implement Personal Hygiene and Good Manufacturing Practices

*Mapped to FIC/N9906, v1.0*

### Terminal Outcomes:

- Discuss the importance of personal hygiene and GMP at the workplace
- Demonstrate the tasks to be performed for ensuring personal hygiene and GMP practices at the workplace.

Duration (in hours): 05:00	Duration (in hours): 10:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> <li>• Define hazards and risks.</li> <li>• Discuss 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 site relevant documented procedure for Personal Hygiene and Visitor/ Contractor rules.</li> <li>• Explain work instructions at levels of employee inside a food manufacturing site.</li> <li>• Discuss how to conduct timely planning and participation of relevant training and awareness sessions on personal hygiene, GMP and related topics.</li> <li>• Explain the importance of timely medical examination from a prescribed and authorized doctor and to comply with the guidelines of Schedule IV as described in Food Safety Standard Authority of India (FSSAI) guidelines.</li> <li>• State how to follow a site relevant documented procedure and area wise work instructions for Good Manufacturing Practices (GMP) to be followed on the site.</li> <li>• List validated Do's &amp; Don'ts inside a food manufacturing firm.</li> <li>• State process flow charts, HACCP summary plan and critical process parameters in each and respective areas of the production line.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate the steps to be performed for implementing good manufacturing practices (GMP).</li> <li>• Demonstrate how to follow work instructions at levels of employee inside a food manufacturing site and ensure that the relevant instructions are well communicated and being followed at the fixed timelines.</li> <li>• Show how to fill data in daily monitoring checklist related to personal hygiene, food safety and GMP.</li> <li>• Demonstrate the process to follow man and materials movement throughout the production facility, to restrict unwanted hazards to cross contaminate the products which are being manufactured in the facility.</li> <li>• Show how to tag and number all the equipment, machinery, tools, and other processing aids to keep a proper traceability of the product being manufactured and handled at site.</li> <li>• Demonstrate process of record keeping and documentation such as Daily Monitoring Sheets, Batch Traceability Records, machine records, product parameters, process control parameters etc.</li> </ul>

- Explain how to identify the material requirements such as manufacturing equipment's, Utensils and other processing aids, cleaning chemicals, cleaning work instructions in all the relevant areas of manufacturing facility.
- Define the Allergens, their risks and the allergen requirements.
- State the relevance of guidelines in manufacturing area and how training evaluation will be implemented.
- Explain the process of audits and ways to address the aspects of Good Manufacturing Procedures, personal hygiene and food safety.

#### **Classroom Aids**

Training Kit - Facilitator's Guide, Participant's Handbook, Presentations and Software, Whiteboard, Marker, Projector, Laptop, Video Films

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

Coats and Aprons; Ear Plugs or Muffs; Eye and Facial Protection; Headwear; Lifting Assistance; Mesh Aprons; Protective Boot Covers; Protective Hand and Arm Covering; Protective Head and Hair Covering; Work Uniforms; Safety and Waterproof Footwear, Containers, Utensils, Hand Tools, Lifting Aids, Stacking Equipment, Processing Unit, Conveyor and Processing Belts, Bucket

## Module 6: Apply Food Safety Practices at Workplace

*Mapped to FIC/N9906, v1.0*

### Terminal Outcomes:

- List the food safety practices at the workplace and the ways to implement them.
- Demonstrate the steps to be followed to implement food safety procedures effectively.

Duration (in hours): 05:00	Duration (in hours): 10:00
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>• Explain requirements to maintain updated facilities, equipment and tool to minimize the risks associated with the products being handled at the site.</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>• Discuss the significance of various types of hazard and safety signs.</li> <li>• Explain FSSAI Schedule IV requirements related to: Pest Control, Cleaning and Sanitation, Utilities, Waste Disposal, Prevention of Cross Contamination, allergen management, corrective action, preventive actions, food operation control etc.</li> <li>• Discuss the relevance of checking critical control points and product parameters.</li> <li>• Explain importance of record keeping and documentation such as daily monitoring sheets, cleaning sheets, parameters etc.</li> <li>• Discuss how to report any food safety and GMP issue to supervisor, if any.</li> </ul>	<ul style="list-style-type: none"> <li>• Show how to apply appropriate techniques to deal with hazards safely and appropriately.</li> <li>• Demonstrate the steps for checking critical control points and product parameters.</li> <li>• Show how to record keeping and documentation such as daily monitoring sheets, cleaning sheets, parameters etc.</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 during emergency and evacuation procedure.</li> </ul>



### Classroom Aids

Training Kit - Facilitator's Guide, Participant's Handbook, Presentations and Software, Whiteboard, Marker, Projector, Laptop, Video Films

### Tools, Equipment and Other Requirements

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, Bricks meter/refractometer

## Module 7: Employability Skills (30 Hours)

*Mapped to DGT/VSQ/N0101, v1.0*

**Duration: 30:00**

### Key Learning Outcomes

#### Introduction to Employability Skills Duration: 1 Hour

After completing this programme, participants will be able to:

1. Discuss the importance of Employability Skills in meeting the job requirements

#### Constitutional values - Citizenship Duration: 1 Hour

2. Explain constitutional values, civic rights, duties, citizenship, responsibility towards society etc. that are required to be followed to become a responsible citizen.
3. Show how to practice different environmentally sustainable practices

#### Becoming a Professional in the 21st Century Duration: 1 Hour

4. Discuss 21st-century skills.
5. Display a positive attitude, self-motivation, problem-solving, time management skills and continuous learning mindset in different situations.

#### Basic English Skills Duration: 2 Hours

6. Use appropriate basic English sentences/phrases while speaking

#### Communication Skills Duration: 4 Hours

7. Demonstrate how to communicate in a well-mannered way with others.
8. Demonstrate working with others in a team

#### Diversity & Inclusion Duration: 1 Hour

9. Show how to conduct oneself appropriately with all genders and PwD
10. Discuss the significance of reporting sexual harassment issues in time

#### Financial and Legal Literacy Duration: 4 Hours

11. Discuss the significance of using financial products and services safely and securely.
12. Explain the importance of managing expenses, income, and savings.
13. Explain the significance of approaching the concerned authorities in time for any exploitation as per legal rights and laws

#### Essential Digital Skills Duration: 3 Hours

14. Show how to operate digital devices and use the associated applications and features, safely and securely
15. Discuss the significance of using the internet for browsing, and accessing social media platforms, safely and securely

#### Entrepreneurship Duration: 7 Hours

16. Discuss the need for identifying opportunities for potential business, sources for arranging money and potential legal and financial challenges

**Customer Service Duration: 4 Hours**

17. Differentiate between types of customers

18. Explain the significance of identifying customer needs and addressing them

19. Discuss the significance of maintaining hygiene and dressing appropriately

**Getting ready for Apprenticeship & Jobs Duration: 2 Hours**

20. Create a biodata

21. Use various sources to search and apply for jobs

22. Discuss the significance of dressing up neatly and maintaining hygiene for an interview

23. Discuss how to search and register for apprenticeship opportunities

## Module 8: On-the-Job Training

### Mapped to Assistant Sorter and Grader - Fruits and Vegetables

<b>Mandatory Duration: 60:00</b>	<b>Recommended Duration: 00:00</b>
<b>Location: On-Site</b>	
<b>Terminal Outcomes</b> <ul style="list-style-type: none"> <li>• Show how to follow standard practices to plan for production.</li> <li>• Demonstrate the tasks required to prepare for the production process.</li> <li>• Show how to wash and dry the produce using the Pump, Water, and Spray System.</li> <li>• Show how to sort and grade the produce efficiently with the Sorting Line Conveyor, Grading Line Conveyor, and Electronic Sorting Machine.</li> <li>• Show how to pack and store the produce using the Packaging Machine, Sealing Machine, Shrink Wrap Machine, and Refrigerator.</li> <li>• Demonstrate the steps to carry out post-production activities, including cleaning and maintaining equipment like the Sorting Table and Conveyor Belt.</li> <li>• Show how to explain the importance of personal hygiene and GMP at the workplace.</li> <li>• Demonstrate the tasks required to ensure personal hygiene and GMP practices at the workplace.</li> <li>• Show how to list and implement food safety practices using the Food Safety Manual and appropriate checklists at the workplace.</li> <li>• Demonstrate the steps required to effectively implement food safety procedures.</li> </ul>	

## Annexure

### Trainer Requirements

Trainer Prerequisites						
Minimum Educational Qualification	Specialisation	Relevant Industry Experience		Training Experience		Remarks
		Years	Specialization	Years	Specialization	
B.Sc./B. Tech./B.E.	Food Technology	3	Fruits and Vegetables Procurement	1	Food Processing	
M.Tech./or MBA	Food Technology	2	Fruits and Vegetables Procurement	1	Food Processing	

Trainer Certification	
Domain Certification	Platform Certification
Certified for Job Role: "Assistant Sorter and Grader - Fruits and Vegetables" mapped to QP: "FIC/Q0108, v5.0". Minimum accepted score is 80%.	Recommended that the Trainer is certified for the Job Role: "Trainer (VET and Skills)", mapped to the Qualification Pack: "MEP/Q2601, v2.0". The 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	
B.Sc./B. Tech./B.E.	Food Technology	3	Fruits and Vegetables Procurement	1	Sorting and Grading the Produce	
M.Tech./or MBA	Food Technology	2	Fruits and Vegetables Procurement	1	Sorting and Grading the Produce	

Assessor Certification	
Domain Certification	Platform Certification
Certified for Job Role: “Assistant Sorter and Grader - Fruits and Vegetables” mapped to QP: “FIC/Q0108, v5.0”. Minimum accepted score is 80%.	Certified for the Job Role: “Assessor (VET and Skills)”, mapped to the Qualification Pack: “MEP/Q2701, v2.0”, with a minimum score of 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. There in 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 banks 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 behavioural aspects as regards the job role and the specific task at hand.

### On the Job:

1. Each module (which covers the job profile of Assistant Sorter and Grader - Fruits and Vegetables) will be assessed separately.

2. The candidate must score 50% in each module to successfully complete the OJT.

3. Tools of Assessment that will be used for assessing whether the candidate is having desired skills and etiquette of dealing with customers, understanding needs & requirements, assessing the customer and perform Soft Skills effectively:

- Videos of Trainees during OJT
- Answer Sheets of Question Banks
- Assessing the Logbook entries of Trainees at Employer location
- Employer Performance Feedback.

4. Assessment of each Module will ensure that the candidate is able to:

- Carry out preparation for production.
- Sort, grade, pack, and store produce effectively.
- Implement food safety guidelines in food processing.
- Develop employability skills for effective workplace performance.



## 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 it upon the completion of the training.
<b>Terminal Outcome</b>	Terminal outcome is a statement of what a learner will know, understand and be able to do upon the completion of a module. A set of terminal outcomes help to achieve the training outcome.

## Acronyms and Abbreviations

Term	Description
NCVET	National Council for Vocational Education and Training
NVEQF	National Vocational Educational Qualification Framework
FICSI	Food Industry Capacity & Skill Initiative
QP	Qualification Pack
MC	Model Curriculum
NSQF	National Skills Qualification Framework
NSQC	National Skills Qualification Committee
NOS	National Occupational Standards
NCO	National Classification of Occupations
ES	Employability Skills
HACCP	Hazard Analysis and Critical Control Points
FSSAI	Food Safety and Standards Authority of India
GMPs	Good Manufacturing Practices
GHP	Good Hygiene Practices
PPE	Personal Protective Equipment
SOP	Standard Operating Procedure
QMS	Quality Management System
FEFO	First Expiry First Out
FIFO	First In First Out
COP	Clean Out of Place
CIP	Clean In Place