



Model Curriculum

QP Name: Preservation Technician-Fruits and Vegetables

QP Code: FIC/Q0202

QP Version: 1.0

NSQF Level: 4

Model Curriculum Version: 1.0

FOOD INDUSTRY CAPACITY & SKILL INITIATIVE (FICSI), Shriram Bharatiya Kala Kendra, 3rd floor,
1, Copernicus Marg, Mandi House, New Delhi, Delhi 110001, Landmark: Opposite Doordarshan Bhawan

Table of Contents

| | |
|---|----|
| Training Parameters..... | 2 |
| Program Overview | 3 |
| Training Outcomes..... | 3 |
| Compulsory Modules | 3 |
| Module 1: Introduction to the Training Program and Overview of Food Processing Industry | 5 |
| Module 2: Prepare and maintain work area for production | 6 |
| Module 3: Carry out preservation of Fruits and Vegetables | 8 |
| Module 4: Ensuring food safety, personal hygiene and workplace sanitation..... | 10 |
| Module 5: Managing accidents and emergencies | 12 |
| Module 6: Work effectively in an organization | 14 |
| Module 7: Material Conservation | 16 |
| Module 8: Energy/electricity conservation..... | 17 |
| Module 9: Waste management/recycling | 18 |
| Module 10: Employability and Entrepreneurship skills | 19 |
| Annexure..... | 21 |
| Trainer Requirements | 21 |
| Assessor Requirements..... | 22 |
| Assessment Strategy..... | 23 |
| References | 24 |
| Glossary..... | 24 |
| Acronyms and Abbreviations..... | 25 |

Training Parameters

| | |
|---|---|
| Sector | Food Processing |
| Sub-Sector | Fruits and Vegetables |
| Occupation | Processing-fruit & vegetables |
| Country | India |
| NSQF Level | 4 |
| Aligned to NCO/ISCO/ISIC Code | NCO2015/ 7514.0700 |
| Minimum Educational Qualification and Experience | 1.Class 10th passed 2.Class 8th Pass with 2 years of relevant experience 3.NSQF level 3 qualification certificate in food processing sector with 1 year relevant experience |
| Pre-Requisite License or Training | NA |
| Minimum Job Entry Age | 16 |
| Last Reviewed On | 12/10/21 |
| Next Review Date | 12/10/24 |
| NSQC Approval Date | 30/12/24 |
| QP Version | 1.0 |
| Model Curriculum Creation Date | 12/10/21 |
| Model Curriculum Valid Up to Date | 30/12/24 |
| Model Curriculum Version | 1.0 |
| Minimum Duration of the Course | 400 Hours |
| Maximum Duration of the Course | 400 Hours |

Program Overview

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

Training Outcomes

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

- Supervise and coordinate activities of workers engaged in preservation of fruits & vegetable products.
- Handles all kinds of machineries involved in preserving fruits and vegetables.
- Describe the various processes involved in preserving fruits and vegetables.
- Perform documentation and record keeping of raw material, ingredients and the finished good.
- Apply sanitation and hygiene practices in the work environment.

Compulsory Modules

The table lists the modules, their duration and mode of delivery.

| NOS and Module Details | Theory Duration | Practical Duration | On-the-Job Training Duration (Mandatory) | On-the-Job Training Duration (Recommended) | Total Duration |
|---|--------------------|---------------------|--|--|---------------------|
| Bridge Module | 36:00 Hours | 12:00 Hours | 00:00 Hours | 00:00 Hours | 48:00 Hours |
| Module 1: Introduction to the training program and Overview of Food Processing Industry | 08:00 Hours | 00:00 Hours | 00:00 Hours | 00:00 Hours | 08:00 Hours |
| Module 11: Employability and Entrepreneurship | 28:00 Hours | 12:00 Hours | 00:00 Hours | 00:00 Hours | 40:00 Hours |
| FIC/N9026: Prepare for production NOS Version No.: 1.0 NSQF Level: 3 | 12:00 Hours | 32:00 Hours | 00:00 Hours | 00:00 Hours | 44:00 Hours |
| Module 2: Prepare and maintain work area for production | 12:00 Hours | 32:00 Hours | 00:00 Hours | 00:00 Hours | 44:00 Hours |
| FIC/N0203 : Carry out preservation of fruits and vegetables Version No.: 1.0 NSQF Level: 4 | 70:00 Hours | 122:00 Hours | 40:00 Hours | 00:00 Hours | 232:00 Hours |
| Module 3: Carry out preservation of Fruit and Vegetable | 50:00 Hours | 82:00 Hours | 30:00 Hours | 00:00 Hours | 162:00 Hours |
| Module 4: Carry out packaging and post production activities of fruits and vegetables | 20:00 Hours | 40:00 Hours | 10:00 Hours | 00:00 Hours | 70:00 Hours |
| FIC/N9901: Implement health and safety | 08:00 Hours | 16:00 Hours | 00:00 Hours | 00:00 Hours | 24:00 Hours |

| | | | | | |
|---|---------------------|---------------------|--------------------|--------------------|---------------------|
| practices at the workplace NOS Version No.1.0 NSQF Level 3 | | | | | |
| Module 5: Ensure food safety and personal hygiene | 04:00 Hours | 08:00 Hours | 00:00 Hours | 00:00 Hours | 12:00 Hours |
| Module 6: Managing accidents and emergencies | 04:00 Hours | 08:00 Hours | 00:00 Hours | 00:00 Hours | 12:00 Hours |
| FIC/N9902: Work effectively in an organization NOS Version No.: 1.0 NSQF Level: 3 | 08:00 Hours | 08:00 Hours | 00:00 Hours | 00:00 Hours | 16:00 Hours |
| Module 7: Work effectively in an organization | 08:00 Hours | 08:00 Hours | 00:00 Hours | 00:00 Hours | 16:00 Hours |
| SGJ/N1702: Optimize resource utilization at workplace NOS Version No.: 1.0 NSQF Level: 3 | 12:00 Hours | 24:00 Hours | 00:00 Hours | 00:00 Hours | 36:00 Hours |
| Module 8: Material conservation | 04:00 Hours | 08:00 Hours | 00:00 Hours | 00:00 Hours | 12:00 Hours |
| Module 9: Energy/ electricity conservation | 04:00 Hours | 08:00 Hours | 00:00 Hours | 00:00 Hours | 12:00 Hours |
| Module 10: Waste management/recycling | 04:00 Hours | 08:00 Hours | 00:00 Hours | 00:00 Hours | 12:00 Hours |
| Total Duration | 146:00 Hours | 214:00 Hours | 40:00 Hours | 00:00 Hours | 400:00 Hours |

Module Details

Module 1: Introduction to the Training Program and Overview of Food Processing Industry

Bridge Module

Terminal Outcomes:

- Discuss the opportunities available for preservation technician in food processing industry
- List the GMP and HACCP practices and FSSAI guidelines applicable in

| | |
|--|--|
| Duration: 08:00 | Duration: 00:00 |
| Theory – Key Learning Outcomes | Practical – Key Learning Outcomes |
| <ul style="list-style-type: none"> • Discuss the future trends and career growth opportunities available to preservation technicians in the food processing industry. • Summarise the key roles and responsibilities of a ‘preservation technician’. • List the various terminologies used by preservation technicians in the food processing industry. • Discuss the role of organisational policies and procedures in the job. • List the sequence of tasks performed for preservation of fruits and vegetable. <p>Discuss the impact of not following Good Manufacturing Practices (GMP), Hazard Critical Analysis and Control Points (HACCP) and Food Safety and Standards Authority of India (FSSAI) guidelines in Fruit and vegetable processing.</p> | |
| Classroom Aids: | |
| Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator’s Guide, Participant’s Handbook. | |
| Tools, Equipment and Other Requirements | |
| Nil | |

Module 2: Prepare and maintain work area for production

Mapped to FIC/N9026, v 1.0

Terminal Outcomes:

- Discuss the tasks to be performed to preserve Fruit and vegetable
- State the importance of maintaining tools and equipment effectively

| | |
|--|---|
| Duration: 12:00 | Duration: 32:00 |
| Theory – Key Learning Outcomes | Practical – Key Learning Outcomes |
| <ul style="list-style-type: none"> • Elucidate production planning process. • Discuss analysis and interpretation of various process charts, product flow charts, etc. • Explain the resource management process. • Calculate procedure to estimate manpower and raw material. • List down equipment type and its use. • Explain the capacity utilization calculation. • Discuss the organizational policies and SOP on cleanliness. • List down the basic concept of food safety and hygiene. • Describe the operating procedure and general maintenance of food production machineries. • State waste management procedures. • List down the methods to inspect tools, equipment and machinery. • Discuss the procedure to allot work or responsibility to the team. | <ul style="list-style-type: none"> • Apply work requirements by obtaining instructions from the supervisor. • Instructions: process chart, product flow chart, formulation, chart, etc. • Prepare, plan and prioritize tasks as per work schedule, • Tasks: inspect, clean, maintain, verify the area and tools, etc. • Calculate the manpower and material requirements as per work requirement, • Material: raw materials and packaging materials. • Show the required quantity of raw materials, packaging materials, equipment, and manpower for production. • Demonstrate capacity utilization of machinery with respect to the processing time, production order, and batch size for each product. • Perform cleaning and maintain the work area as per organizational procedures. • Perform cleaning and maintain the machines and tools and sanitize them as per the organization's specifications and standards. • Show disposal of the waste material at designated place safely. • Display the tools, equipment, and machinery to ascertain suitability for use. • Conduct role play to report information such as faulty tools and equipment to the concerned authority. |
| Classroom Aids | |
| Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator's Guide, Participant's Handbook | |

Tools, Equipment and Other Requirements

Cleaning machines, extruder, vegetable washer, vegetable peeler, pulveriser, fryer, roaster, blender, strainer, canning machineries blender, Measurement Cane; Weighing balance, Timer, Gas with Burner; Knives, spatulas, packing wrap rolls, measuring cup and spoons, utensils, ladle, ladle with holes, digital hygrometer, Muslin Cloth; Weighing Machine; Milk Stirrer; Thermometer; Test Tube (Glass); Test Tube Holder; Gas with Burner;

Module 3: Carry out preservation of Fruits and Vegetables

Mapped to FIC/N0203, v 1.0

Terminal Outcomes:

- Discuss the process to Dry/dehydrate and freeze fruits and vegetables
- Demonstrate the standard practices followed for drying, dehydrating and freezing of fruits and vegetables

| | |
|---|--|
| Duration: 50:00 | Duration: 82:00 |
| Theory – Key Learning Outcomes | Practical – Key Learning Outcomes |
| <ul style="list-style-type: none"> • List the raw materials to be procured. • Discuss the production plan. • State how to dry/dehydrate fruits and vegetables. • List types of peeling. • Explain the process of reheating the lye solution. • Discuss the use of different solar dryers. • Discuss how to check the physical parameters of the dried product passing out of the dryer. • Explain how to transfer dried product into scraping line or to vibrating mesh conveyor to remove any undesirable particles left on the produce. | <ul style="list-style-type: none"> • Demonstrate how to check the weight, appearance, and other physical parameters. • Show how to transfer produce into the washing tank. • Show how to operate agitator. • operate sorting/inspecting line conveyor to transfer produce to inspection station. • inspect visually and remove damaged, blemished and rotten fruits and discard them. • Show how to prepare solution for various peeling method. • operate conveyor or elevator and transfer sorted produce into peeler or corer machine. • Show how to set controls of a blancher. • Perform the inspection of blanched produce . • Demonstrate how to transfer dried produce to different dryers for removal of moisture. • Show how to set parameters of dryer. • Carry out cooling of the dried produce • Carry out forming and filling of cans • Show how to add brine and the steps before sealing the cans. • Demonstrate the post sealing process. • Show different steps of freezing the fruits and vegetables. |
| Classroom Aids | |
| Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator's Guide, Participant's Handbook | |
| Tools, Equipment and Other Requirements | |
| Fruit Washer, Peeler, Fruit Pulper, Juice Extractor, Clarifier, Filter, Pasteurizer, Steam Jacketed Kettles, Packaging Machines, Protective Gloves, Head Caps, Lab Coat, Safety Goggles, Safety Boots, Mouth Masks, Sanitizer, Food Safety Manual | |

Module 4: Carry out packaging and post production activities of fruits and vegetables

Mapped to FIC/N0203, v 1.0

Terminal Outcomes:

- Describe the procedure to pack and label the preserved fruits and vegetables
- Demonstrate how to perform post production cleaning and maintenance of equipment

| | |
|---|--|
| Duration: 20:00 | Duration: 40:00 |
| Theory – Key Learning Outcomes | Practical – Key Learning Outcomes |
| <ul style="list-style-type: none"> • List the raw materials to be procured. • List types of peeling. • Explain the process of reheating the lye solution. • Explain how to clean and maintain the equipment after usage. • List different quality tests performed to check the freshness of fruits and vegetables. | <ul style="list-style-type: none"> • Show the process to transfer the preserved produce to quality lab for testing. • Demonstrate the process to load the packaging material and check for metallic substance. • Show how to document and record necessary information. • Demonstrate the steps of packaging and labelling. • Perform post production cleaning and maintenance of used equipment. |
| Classroom Aids | |
| Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator's Guide, Participant's Handbook | |
| Tools, Equipment and Other Requirements | |
| Fruit Washer, Peeler, Fruit Pulper, Juice Extractor, Clarifier, Filter, Pasteurizer, Steam Jacketed Kettles, Packaging Machines, Protective Gloves, Head Caps, Lab Coat, Safety Goggles, Safety Boots, Mouth Masks, Sanitizer, Food Safety Manual | |

Module 5: Ensure food safety and personal hygiene

Mapped to FIC/N9901, v 1.0

Terminal Outcomes:

- Perform safety and sanitation related functions (for processing food products).
- Apply food safety practices (for processing food products).

| | |
|--|---|
| Duration: 04:00 | Duration: 08:00 |
| Theory – Key Learning Outcomes | Practical – Key Learning Outcomes |
| <ul style="list-style-type: none"> • Define hazards and risks. • Recall the various types of health and safety equipment available in an organisation and the methods for obtaining them. • Discuss the organisational health and safety policies and procedures. • Discuss the relevant health and safety standards to be followed in the job as listed in 'The Food Safety and Standards Act, 2006'. • 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. • Elucidate the ways to prevent product contamination and cross contamination at the workplace. • Discuss the ways to handle items that can lead to allergic reactions in a retail environment. • State the importance of preventive health check-ups for ensuring personal hygiene. • State the importance of storing food at specified temperature. • Discuss the importance of sanitising self and the work area safely and appropriately. • Recall the ways to store the sanitising materials appropriately. | <ul style="list-style-type: none"> • Employ appropriate techniques to prevent product contamination and cross contamination. • Demonstrate the steps to be performed for implementing good manufacturing practices (GMP) in a retail environment. • Show how to treat injuries such as cuts, boils, skin infections and grazes appropriately. • Apply suitable methods for disinfecting the work area and equipment thoroughly. • Demonstrate how to wash hands and use alcohol-based sanitisers appropriately. • Show how to wear personal protective equipment such as gloves, hairnets, masks, ear plugs, goggles, shoes etc. properly ensuring adequate protection. • Prepare a sample report consisting of information such as illness to self and others as per organisational practice. • Roleplay a situation on how to communicate with the supervisor for reporting illness of self and others. |
| 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 6: 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">• List the various types of health and safety hazards present in the environment.• Discuss the possible causes of risk, hazard or accident at the workplace.• Elucidate the standard practices and precautions used to control and prevent risks, hazards and accidents at the workplace.• Discuss the dangers associated with the use of electrical and other equipment.• State the importance of using protective equipment and clothing for specific tasks and work conditions.• Discuss the role of organisational protocols in preventing accidents and hazards.• Recall the preventive and remedial actions to be taken in the case of exposure to toxic materials at the workplace.• Discuss the various causes of fire and ways to prevent them.• Elaborate the steps to use different types of fire extinguishers.• Explain the procedure to provide artificial respiration and cardio-pulmonary resuscitation (CPR) to the affected.• Summarise the rescue techniques to be followed at times of fire hazard.• Discuss the significance of various types of hazard and safety signs.• Discuss the workplace emergency and evacuation procedures.• Elaborate the type of first-aid treatment to be offered at times of shock, electrical | <ul style="list-style-type: none">• Apply appropriate techniques to deal with hazards safely and appropriately.• Demonstrate the use of various types of fire extinguishers effectively.• Demonstrate appropriate ways to respond to an accident situation or medical emergency promptly and appropriately.• Demonstrate the steps to be followed for providing artificial respiration and cardio-pulmonary resuscitation (CPR) in various instances (e.g. cardiac arrest).• Perform the steps to be followed during emergency and evacuation procedure.• Demonstrate the procedure of freeing a person from electrocution.• Show how to administer appropriate first aid to victims in case of cuts, bleeding, burns, choking, electric shock, poisoning etc. |

| | |
|--|--|
| <p>shock, bleeding, breaks to bones, minor burns, resuscitation, poisoning, eye injuries, etc.</p> <ul style="list-style-type: none"> • Discuss about the potential injuries and ill health conditions that are caused due to incorrect manual handling practices. • List the precautions to be taken while lifting and carrying materials in a food retail environment. | |
| Classroom Aids: | |
| Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator's Guide, Participant's Handbook | |
| Tools, Equipment and Other Requirements | |
| <p>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.</p> | |

Module 7: 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">• Discuss the applicable organisational quality procedures and processes for working effectively in a team.• Elucidate the legislations, standards, policies, and procedures followed in the organization relevant to employment, behaviour, harassment, discrimination, and performance conditions.• State the importance of well-defined reporting structure in an organisation.• List the various types of inter-dependent functions applicable in the job.• Discuss the different types of harassment and discrimination based on gender, disability, caste, religion, and culture.• List the key factors that aid in prioritising tasks.• Discuss the components of effective communication and its importance at the workplace.• State the impact of poor communication on the employee, the employer, and the customer.• State the importance of teamwork in organizational and individual success.• Discuss the importance of ethics and discipline for professional success.• Explain the ways to address grievances appropriately and effectively.• 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 | <ul style="list-style-type: none">• Roleplay a situation on how to obtain information, seek clarifications, reciprocate understanding and provide information accurately and clearly.• 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.• Show how to consult and assist others to maximize effectiveness and efficiency at work.• Dramatise a situation to show how to escalate problems and grievances beyond own scope to the concerned authority.• Roleplay a situation on how to take appropriate action to resolve conflicts at the workplace.• Roleplay a situation on how to report incidents of harassment and discrimination to appropriate authority. |

| | |
|---|--|
| <p>disability (PwD).</p> <ul style="list-style-type: none"> • 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 8: Material Conservation

Mapped to SGJ/N1702 v 1.0

Terminal Outcomes:

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

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

Module 9: Energy/electricity conservation

Mapped to SGJ/N1702, v1.0

Terminal Outcomes:

- Discuss optimal usage of energy/electricity

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

Module 10: Waste management/recycling

Mapped to SGJ/N1702, v1.0

Terminal Outcomes:

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

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

Module 11: Employability and Entrepreneurship skills

Bridge Module

Terminal Outcomes:

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

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

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

| |
|--|
| 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 | |
| Diploma/Hotel Management | Fruits and Vegetables | 3 | Fruits and Vegetables | 2 | Fruits and Vegetables | |
| B.Sc. | Home Science | 3 | Fruits and Vegetables | 2 | Fruits and Vegetables | |
| Diploma | Food Technology/Food engineering | 3 | Fruits and Vegetables | 2 | Fruits and Vegetables | |
| BSc/BTech | Food Technology/Food engineering | 3 | Fruits and Vegetables | 1 | Fruits and Vegetables | |
| MSc/MTech | Food Technology/Food engineering | 2 | Fruits and Vegetables | 1 | Fruits and Vegetables | |

| Trainer Certification | |
|--|---|
| Domain Certification | Platform Certification |
| Certified for Job Role: "Preservation Technician" mapped to QP: "FIC/Q0111, v1.0". Minimum accepted score is 80% | Recommended that the Trainer is certified for the Job Role: "Trainer", mapped to the Qualification Pack: "MEP/Q0102". Minimum accepted score is 80 % as per FICSI guidelines. |

Assessor Requirements

| Assessor Prerequisites | | | | | | |
|-----------------------------------|---|------------------------------|-------------------|--------------------------------|-------------------|---------|
| Minimum Educational Qualification | Specialization | Relevant Industry Experience | | Training/Assessment Experience | | Remarks |
| | | Years | Specialization | Years | Specialization | |
| B.Sc./Diploma | Hotel management/ Food technology/Ho me science | 3 | Fruits/Vegetables | 1 | Fruits/Vegetables | |

| Assessor Certification | |
|--|--|
| Domain Certification | Platform Certification |
| Certified for Job Role: "Preservation Technician" mapped to QP: "FIC/Q0111, v1.0". Minimum accepted score is 80% | Recommended that the Assessor is certified for the Job Role: "Assessor", mapped to the Qualification Pack: "MEP/Q2701". Minimum accepted score as per MEPSC guidelines is 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.

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC
2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
3. Assessment will be conducted for all compulsory NOS, as well as the selected elective NOS/set of NOS. OR
4. Assessment will be conducted for all compulsory NOS, as well as the selected optional NOS/set of NOS.
5. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below)
6. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training center based on this criteria
7. To pass the Qualification Pack, every trainee should score a minimum of 70% of aggregate marks to successfully clear the assessment.
8. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack

References

Glossary

| Term | Description |
|------------------------------|---|
| Declarative Knowledge | 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. |
| Key Learning Outcome | 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). |
| OJT (M) | On-the-job training (Mandatory); trainees are mandated to complete specified hours of training on site |
| OJT (R) | On-the-job training (Recommended); trainees are recommended the specified hours of training on site |
| Procedural Knowledge | 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. |
| Training Outcome | Training outcome is a statement of what a learner will know, understand and be able to do upon the completion of the training . |
| Terminal Outcome | 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 |
|-------|---|
| NOS | National Occupational Standard(s) |
| NSQF | National Skills Qualifications Framework |
| QP | Qualifications Pack |
| TVET | Technical and Vocational Education and Training |
| CIP | Clean In Place |
| COP | Clean Out Of Place |
| ERP | Enterprise Resource Planning |
| FIFO | First In First Out |
| EFO | First Expiry First Out |
| FSSAI | Food Safety and Standards Authority of India |
| GMP | Good Manufacturing Practice |
| GHP | Good Hygiene Practices |
| HACCP | Hazard Analysis and Critical Control Point |
| NOS | National Occupational Standard |
| NSQF | National Skill Qualification Framework |
| NVEQF | National Vocational Educational Qualification Framework |
| NVQF | National Vocational Qualification Framework |
| OS | Occupational Standard |
| PC | Performance Criteria |
| QP | Qualification Pack |
| SSC | Sector Skill Council |
| SOP | Standard Operating Procedure |
| QMS | Quality Management System |