



Model Curriculum

QP Name: Soya Products Processor

QP Code: FIC/Q8004

QP Version: 1.0

NSQF Level: 4

Model Curriculum Version: 1.0

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Training Parameters

Sector	Food Processing
Sub-Sector	Soya Food
Occupation	Processing-Soya Foods
Country	India
NSQF Level	4
Aligned to NCO/ISCO/ISIC Code	NCO-2015/NIL
Minimum Educational Qualification and Experience	1. Class 12th 2. Class 10th and 2 years of relevant experience 3. Class 10th pass and 2 years of ITI 4. Class 10th pass and 1 year of ITI and 1 year of experience
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 years
Last Reviewed On	25/09/2021
Next Review Date	24/09/2024
NSQC Approval Date	Pending
QP Version	1.0
Model Curriculum Creation Date	23/09/2021
Model Curriculum Valid Up to Date	22/09/2024
Model Curriculum Version	1.0
Minimum Duration of the Course	320 Hours
Maximum Duration of the Course	320 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 participants will be able to:

- Perform various tasks to prepare for production of soya products
- Apply necessary health and safety practices to ensure food safety and personal hygiene
- Work with various organisational departments effectively
- Use resources at the workplace optimally
- Perform various tasks to process the defatted soya flour and produce soya protein of texturized different size and shape
- Describe the procedure to produce soya milk, soya beverages and soya paneer (tofu)

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	32:00	12:00	00:00	00:00	44:00
Module 1: Introduction to Food Processing Industry and Soya Product Processor	04:00	00:00	00:00	00:00	04:00
Module 11: Employability and Entrepreneurship skills	28:00	12:00	00:00	00:00	40:00
FIC/N9026 – Prepare for Production NOS Version No. 1.0 NSQF Level 3	12:00	32:00	00:00	00:00	44:00
Module 2: Prepare for Soya Food Production	12:00	32:00	00:00	00:00	44:00
FIC/N8010 - Produce Texturized Soya Protein of Different Shapes and Sizes NOS Version No. 1.0 NSQF Level 4	72:00	84:00	00:00	00:00	156:00
Module 3: Prepare Raw Material and Extruder for Texturized Soya Protein Production	32:00	40:00	00:00	00:00	72:00
Module 4: Produce Texturized Soya Protein	40:00	44:00	00:00	00:00	84:00

FIC/N9901- Implement Health and Safety Practices at the Workplace NOS Version No. 1.0 NSQF Level 3	08:00	16:00	00:00	00:00	24:00
Module 5: Ensuring Food Safety and Personal Hygiene	04:00	08:00	00:00	00:00	12:00
Module 6: Managing Accidents and Emergencies	04:00	08:00	00:00	00:00	12:00
FIC/N9902 – Work Effectively in an Organization NOS Version No. 1.0 NSQF Level 3	08:00	08:00	00:00	00:00	16:00
Module 7: Working Effectively with Others	08:00	08:00	00:00	00:00	16:00
SGJ/N1702 – Optimize Resource Utilization at the workplace NOS Version No. 1.0 NSQF Level 3	12:00	24:00	00:00	00:00	36:00
Module 8: Material Conservation	04:00	08:00	00:00	00:00	12:00
Module 9: Energy/Electricity Conservation	04:00	08:00	00:00	00:00	12:00
Module 10: Waste Management/Recycling	04:00	08:00	00:00	00:00	12:00
Total Duration	144:00	176:00	00:00	00:00	320:00

Elective Modules

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

Elective 1:

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
FIC/N8011 - Produce Soya Beverages and Paneer (tofu) NOS Version No. 1.0 NSQF Level 4	72:00	84:00	00:00	00:00	156:00
Module 12: Produce	32:00	40:00	00:00	00:00	72:00

Soya Milk and Flavoured Beverages					
Module 13: Produce Soya Paneer (Tofu)	40:00	44:00	00:00	00:00	84:00
Total Duration	72:00	84:00	00:00	00:00	156:00

Module Details

Module 1: Introduction to Food Processing Industry and Soya Products Processor

Bridge Module

Terminal Outcomes:

- Describe the food processing industry and its sub-sectors in brief
- Discuss the roles and responsibilities of a Soya Products Processor

Duration: 04:00	Duration: 00:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • State the importance of the training program for a Soya Products Processor • Discuss the food processing industry and soya food processing sub-sector in brief • Discuss the career opportunities available to a Soya Products Processor in the food processing industry • Explain the terminologies used in the process of soya foods production • Elaborate standard code of conduct and business etiquette in the food processing industry • Discuss the workflow and departmental organization in Soya Food Processing Sector 	
Classroom Aids:	
Whiteboard, Marker, Duster, Projector, Laptop, PowerPoint Presentation	
Tools, Equipment and Other Requirements	
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

Duration: 12:00	Duration: 32:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Elucidate production planning process. KU1 • List the manpower and material requirements as per work requirement. (KU4)(KU7) • Discuss the importance of various process charts, product flow charts, resource management process, etc. KU2, KU3 • List the priority of tasks as per work schedule.(KU5) • Recall the steps to plan capacity utilization of machinery with respect to the processing time, production order and batch size for each product. (KU6) • List down the basic concept of food safety and hygiene. KU8 • List the tools, equipment and production materials required.(KU9)(KU10)(KU11) • Recall various steps required to organize production materials appropriately.(KU12)(KU13) 	<ul style="list-style-type: none"> • Demonstrate the procedure for obtaining work requirements from supervisors.(PC1)(PC3) • Prepare samples to plan and prioritize work schedules (PC2) • Demonstrate how to estimate the resources as per the requirement (raw materials, packaging materials, machineries, and manpower) (PC4) • Employ appropriate practices to plan capacity utilization of machineries (PC5) • Carry out cleaning and maintaining the work area following organizational procedures.(PC6) • Perform cleaning of machines and tools and sanitize them following the organization's specifications and standards. (PC7) • Demonstrate how to dispose of the waste material at the designated place, safely.(PC8) • Inspect the tools, equipment and machinery to ascertain suitability for use.(PC9) • Report information such as faulty tools and equipment to the concerned authority.(PC10) • Demonstrate how to organize production materials appropriately. (PC11)(PC12) • Demonstrate how to allot responsibilities to the helpers.(PC13)
Classroom Aids	
Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator's Guide, Participant's Handbook.	

Tools, Equipment and Other Requirements

Process related documents, Sample raw material(defatted soya flour), Sieving machine, Extruder and its components, etc., Protective Gloves, Head Caps

Fire extinguishers, High speed exhausts, Masks – Head cover, mouth cover, cleaning ingredients and tools, Aprons, Safety Goggles, Safety Boots, Mouth Masks, Sanitizer, Food Safety Manual

Module 3: Prepare Raw Material and Extruder for Texturized Soya Protein Production

Mapped to FIC/N8010 v 1.0

Terminal Outcomes:

- Describe the procedure to be followed for preparing the raw material
- Demonstrate the steps to be performed for preparing the extruder for soya protein production

Duration: 32:00	Duration: 40:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Discuss the job responsibilities, standard operating procedures, food safety and hygiene standards, code of business conduct, and personal protective equipment required during production process • Discuss provision of wages, working hours and accident compensation as per standard • List different types of soya products, machinery and varieties of soya bean flour used for the production and processing of texturized soya protein • State the significance of weighing cleaned defatted soya flour required for the batch as per work requirement • Discuss the importance of adding appropriate amount of water and raw materials into the blending machine before starting the blending process for production State the importance of conducting pre-operation checks of the extruder like checking if all parts are clean, whether all bolts tightened and die is not blocked before starting the extrusion process • State the principles of the extrusion process and basic mathematics • Describe various types of extruder, their components and importance of using an extruder during production 	<ul style="list-style-type: none"> • Apply appropriate methods to check the weight and moisture content of the received raw material (defatted soya flour) as per standards • Demonstrate how to fix/change screens of the sieving machines, set controls parameters such as speed, start machine and transfer the raw material in the sieving machine to remove impurities like dirt, dust, stones, etc. during production • Show how to place container under the discharge outlet of the sieving machine and replace the filled container with an empty container • Apply appropriate practices to transfer the cleaned raw material to the production area for further processing • Demonstrate how to operate the blending machine • Show how to transfer soya flour into the feeder of the extruder manually or using the machine to start extrusion process • Perform the steps to prepare the extruder like selecting, assembling and fixing the screws, cleaning and installing dies, assembling and attaching the blade and cutter motor and selecting and fitting machine components and related attachments
Classroom Aids:	
Training kit (Trainer guide, Presentations), White board, Marker, Projector, Laptop, Presentation, Participant Handbook and Related Standard Operating Procedures	
Tools, Equipment and Other Requirements	
Sample raw material(defatted soya flour), Sieving machine, Extruder and its components, etc.	

Module 4: Produce Texturized Soya Protein

Mapped to FIC/N8010 v 1.0

Terminal Outcomes:

- Describe the process of producing texturized soya protein of different size and shape
- Explain the reporting procedure, in case of any discrepancy
- Perform the maintenance procedure of the production machines and their components

Duration: 40:00	Duration: 44:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Explain the standard processes of procurement, store management, inventory management, quality management and key contact points for query resolution and basic mathematics • Discuss the production process and process parameters for texturized soya protein • Elaborate on the operating, handling and maintenance procedures of processing tools, equipment and machinery • State the importance of following the process parameter chart for the product produced • Outline the importance of ensuring that all material has exited the die before stopping the extruder • Describe various quality parameters and quality assessment procedure based on physical parameters of the production and importance of checking the quality and quantity of finished products to ensure compliance to specifications • Describe different types and categories of packaging materials and packaging machinery • Discuss the importance of packing the product as per standards and transferring a sample to the quality lab for analysis • Describe the storage procedures for raw materials, packaging materials, and finished product • State the significance of cleaning the work area, equipment and tools using 	<ul style="list-style-type: none"> • Show to set processing and operating parameters of extruder such as temperature, pressure, RPM, the flow rate of raw materials, etc. in the control panel as per standard procedure • Demonstrate the procedure to operate extruder, feed raw material in required quantity to produce extruded products and change the die as per required shape and size • Apply appropriate monitoring techniques to check dials and gauges for temperature, pressure, etc. as the product begins to pass out of the extruder and ensure process parameters are maintained and adjust settings as required • Apply appropriate procedure to check the quality and quantity of produced product and adjust setting to achieve desired specification of the product • Demonstrate how to shut down the extruder in case of emergency, locate and replace the faulty component and assemble and resume normal start-up procedures • Perform the step like loading the packaging material and labels, setting packing quality and labelling details and operating the packing machine to pack the finished products • Dramatize a situation on how to report discrepancies/concerns to department supervisor for immediate action and implement the suggested corrective action • Apply appropriate practices to attend minor repairs/faults (if any) of all

recommended cleaning agents and sanitizers, disposing of waste and ensuring periodic maintenance of all machines and equipment as per standard and suppliers instructions/manuals	components and machines
Classroom Aids:	
Training kit (Trainer guide, Presentations), White board, Marker, Projector, Laptop, Presentation, Participant Handbook and Related Standard Operating Procedures	
Tools, Equipment and Other Requirements	
Extruder and its components, Samples of packaging material, Sample labels, production machine, cleaning equipment and supplies etc.	

Module 5: 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"> • 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 	<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>to be offered at times of shock, electrical 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	
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 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 v 1.0

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 v 1.0

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 and software, 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 	<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.

<p>Abhiyan</p> <ul style="list-style-type: none"> • Understand the importance of entrepreneurship • 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	

Module 12: Produce Soya Milk and Flavoured Beverages

Mapped to FIC/N8011 v 1.0

Terminal Outcomes:

- Demonstrate the standard procedure to prepare the soya milk and beverages
- Discuss the tasks to be performed for packaging finished soya milk and beverages

Duration: 32:00	Duration: 40:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Discuss the standard operating procedures, food safety and hygiene standards, code of business conduct, personal protective equipment required for production of various types of soya products • Discuss job responsibilities/duties, provision of wages, working hours and accident compensation relevant to the production as per standard • Explain the standard processes of procurement, store management, inventory management, quality management, basic mathematics and key contact points for query resolution • Discuss various types and varieties of soya bean used for production of soya milk and types of machinery used in processing • Describe the standard procedure of operating, handling and maintenance of soya processing machinery, tools and equipment • State the importance of checking the weight of raw materials (soya bean) received from suppliers/vendors/store to produce soya milk and flavoured beverages • Discuss the importance of weighing dehulled soya bean for the batch and transfer into container/tank for soaking • Describe the production process and process parameters for soya milk production • List the quality parameters, basic food microbiology and quality assessment based on physical parameters for soya milk and beverages production • Explain types and category of packaging 	<ul style="list-style-type: none"> • Demonstrate how to prepare the raw material (soya bean) and required machinery (dehulling machine) for de-hulled soya bean production • Show how to prepare soaking solution and soak the soyabean for the soya milk and other beverages production • Demonstrate the steps of transferring the soaked soyabean, set controls and operate the grinding machine to grind the soaked soya bean into the creamy soya bean concentrate for soya milk production • Apply appropriate practices to collect soya bean concentrate into tank/container and soya fiber residue (okara) in the disposal bin after the grinding process • Employ appropriate practices to prepare cooked soya slurry and open outlet valve to transfer cooked soya slurry into tank/container • Show how to separate the soya milk and soya fiber residue as well as the procedure to make frothy soya beverage mixtures • Demonstrate how to pasteurize soya beverage and break its fat to give a uniform smoother consistency • Apply appropriate procedure to collect homogenized soya beverage in the sterile tank, monitor gauges and maintain temperature until soya beverage is transferred to packaging line • Apply appropriate practices to pack, label and store the finished soya milk and beverages after production process

<p>materials and packaging machinery and storage procedures for raw materials, packaging materials, and finished product</p> <ul style="list-style-type: none"> Elaborate various cleaning procedures like CIP and COP to be used for required tools and machinery for soya milk and beverages 	
Classroom Aids:	
Training kit (Trainer guide, Presentations), White board, Marker, Projector, Laptop, Presentation, Participant Handbook and Related Standard Operating Procedures	
Tools, Equipment and Other Requirements	
De-hulling machine, De-hulled soya bean, Sodium-bi-carbonate, Water, Grinding machine, Cooking machine, Pasteurizer, Sample packaging material, etc.	

Module 13: Produce Soya Paneer (Tofu)

Mapped to FIC/N8011 v 1.0

Terminal Outcomes:

- Demonstrate the standard procedure to prepare the soya paneer (Tofu)
- Discuss the tasks to be performed for packaging finished soya paneer (Tofu)

Duration: 40:00	Duration: 44:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • List various soya milk coagulant (like calcium sulphate, magnesium chloride, citric acid, acetic acid, etc) required to prepare coagulant solution • State the importance of checking the temperature of soya milk for appropriate temperature • Describe the production process and process parameters for producing soya paneer (tofu) • List the quality parameters, basic food microbiology and quality assessment based on physical Parameters for soya paneer (tofu) production • State the importance of the quality analysis of the prepared tofu sample • Discuss various types of packaging materials, packaging machinery used in soya paneer production • Explain the procedures of storing the raw materials, packaging materials, and finished soya paneer • Elaborate various cleaning procedures like CIP and COP to be used for required tools and machinery for soya paneer • Discuss the types of sanitizers and disinfectants used for cleaning the tools, equipment and machineries and their handling and storing methods • Outline food laws and regulations on product, packaging, labelling, safety and hygiene, Good Manufacturing Practice (GMP) and Hazard Analysis and Critical Control Point (HACCP) • State the significance of cleaning the work area, equipment and tools using recommended cleaning agents and sanitizers, disposing of waste, attending 	<ul style="list-style-type: none"> • Apply appropriate practices to transfer hot unflavoured soya milk into vat/container and start agitator or manually stir the milk to reduce the temperature • Prepare the coagulant solution as per standard • Employ appropriate practices to separate the bean curd and soya milk whey from the soya milk • Show how to drain soya milk whey manually or through a filter and separate it from bean curd • Demonstrate the procedure to compress and remove soya milk whey to prepare soya paneer (tofu) • Apply appropriate practices to cut the soya paneer into smaller blocks using a knife or mechanical cutter to the desired shape and weight • Apply appropriate practices to pack, label and store the finished soya paneer after production • Dramatize a situation on how to report discrepancies/concerns to department supervisor and implement the suggested corrective action

minor repairs/faults and maintaining all machines and equipment as per standard and suppliers instructions/manuals	
Classroom Aids:	
Training kit (Trainer guide, Presentations), White board, Marker, Projector, Laptop, Presentation, Participant Handbook and Related Standard Operating Procedures	
Tools, Equipment and Other Requirements	
Agitator, Stirrer machine, Ladle, Cheese cloth, Filter machine, Pneumatic press, Knife or mechanical cutter, Packaging material, Packaging machine, etc.	

Annexure

Trainer Requirements

Trainer Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training Experience		Remarks
		Years	Specialization	Years	Specialization	
Diploma	Food technology/engineering/ Dairy technology/Home science and allied subjects	4	Soya Foods	4	Soya Foods	
Bachelors/graduate	Food technology/engineering/ Dairy technology/Home science	3	Soya Foods	3	Soya Foods	
Masters	Food technology/engineering/ Dairy technology/home science	2	Soya Foods	2	Soya Foods	

Trainer Certification	
Domain Certification	Platform Certification
"Soya Products Processor", "FIC/Q8004, V1.0", Minimum accepted score is 80%	"Trainer", "MEP/Q2601, V1.0" with a scoring of minimum 80%

Assessor Requirements

Assessor Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training Experience		Remarks
		Years	Specialization	Years	Specialization	
Diploma/Bachelors/Masters	Hotel Management/Food Technology/Home Science/Allied subjects	3	Soya Foods	2	Soya Foods	

Assessor Certification	
Domain Certification	Platform Certification
"Soya Products Processor", "FIC/Q8004, 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.

1. Assessment System Overview:

- Batches assigned to the assessment agencies for conducting the assessment on SDSM/SIP or email
- Assessment agencies send the assessment confirmation to VTP/TC looping SSC
- Assessment agency deploys the ToA certified Assessor for executing the assessment
- SSC monitors the assessment process & records
- If the batch size is more than 30, then there should be 2 Assessors.

2. Testing Environment: Assessor must:

- Confirm that the centre is available at the same address as mentioned on SDMS or SIP
- Check the duration of the training.
- Check the Assessment Start and End time to be as 10 a.m. and 5 p.m.
- Check that the allotted time to the candidates to complete Theory & Practical Assessment is correct.
- Check the mode of assessment—Online (TAB/Computer) or Offline (OMR/PP).
- Confirm the number of TABs on the ground are correct to execute the Assessment smoothly.
- Check the availability of the Lab Equipment for the particular Job Role.

3. Assessment Quality Assurance levels / Framework:

- Question papers created by the Subject Matter Experts (SME)
- Question papers created by the SME should be verified by the other subject Matter Experts along with the approval required from THSC
- Questions are mapped with NOS and PC
- Question papers are prepared considering that level 1 to 3 is for the unskilled & semi-skilled individuals, and level 4 and above are for the skilled, supervisor & higher management
- Assessor must be ToA certified
- Assessment agency must follow the assessment guidelines to conduct the assessment

4. Types of evidence or evidence-gathering protocol:

- Time-stamped & geotagged reporting of the assessor from assessment location
- Centre photographs with signboards and scheme specific branding
- Biometric or manual attendance sheet (stamped by TP) of the trainees during the training period
- Time-stamped & geotagged assessment (Theory + Viva + Practical) photographs & videos

5. Method of verification or validation:

- Surprise visit to the assessment location
- Random audit of the batch

- Random audit of any candidate
6. Method for assessment documentation, archiving, and access
- Hard copies of the documents are stored
 - Soft copies of the documents & photographs of the assessment are uploaded / accessed from Cloud Storage and are stored in the Hard Drives

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
QP	Qualification Pack
NSQF	National Skills Qualification Framework
NSQC	National Skills Qualification Committee
NOS	National Occupational Standards
TVET	Technical and Vocational Education and Training
SOP	Standard Operating Procedure
OH&S	Occupational Health and Safety
PPE	Personal Protective Equipment
HACCP	Hazard Analysis and Critical Control Points
FSSAI	Food Safety and Standards Authority of India
GMP	Good Manufacturing Practices
GHP	Good Hygiene Practices
CPR	Cardiopulmonary Resuscitation