





Model Curriculum

QP Name: Industrial Baker

QP Code: FIC/Q5006

QP Version: 1.0

NSQF Level: 4

Model Curriculum Version: 1.0

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Training Parameters

Sector	Food Processing	
Sub-Sector	Bread and bakery	
Occupation	Processing	
Country	India	
NSQF Level	4	
Aligned to NCO/ISCO/ISIC Code	NCO 2015/7512.0100	
Minimum Educational Qualification and Experience	 Class 10 passed Class 8th passed with 2 years of relevant experience NSQF Level 3 qualification certificate of food processing sector with 2 years of experience 	
Pre-Requisite License or Training	NA	
Minimum Job Entry Age	18 years	
Last Reviewed On	30/08/2021	
Next Review Date	29/08/2024	
NSQC Approval Date	25/11/2021	
QP Version	1.0	
Model Curriculum Creation Date	30/08/2021	
Model Curriculum Valid Up to Date	29/08/2024	
Model Curriculum Version	1.0	
Minimum Duration of the Course	380 Hours	
Maximum Duration of the Course	380 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:

- Prepare different bakery products for production
- Use various techniques for production of bakery products
- Use specialised equipment and tools to produce various types of bakery products
- Evaluate quality parameters of finished goods
- Produce baked products in industrial units
- Apply health and safety practices at the workplace to ensure food safety and personal hygiene
- Follow emergency procedures and infection control practices workplace
- Work effectively in an organisation
- Optimize resource utilization at workplace

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 food processing sector and the job of 'Industrial Baker'	08:00 Hours	00:00 Hours	00:00 Hours	00:00 Hours	08:00 Hours
Module 10: Employability and Entrepreneurship skills	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 4	12:00 Hours	32:00 Hours	00:00 Hours	00:00 Hours	44:00 Hours
Module 2: Prepare work area and equipment for producing baked products	12:00 Hours	32:00 Hours	00:00 Hours	00:00 Hours	44:00 Hours
FIC/N5003 - Produce baked products in industrial units NOS Version No. 2.0 NSQF Level 4	52:00 Hours	160:00 Hours	00:00 Hours	00:00 Hours	212:00 Hours





Module 3: Carry out production of baked products as per need	52:00 Hours	160:00 Hours	00:00 Hours	00:00 Hours	212:00 Hours
FIC/N9901- Implement health and safety practices at the workplace NOS Version No. 1.0	08:00 Hours	16:00 Hours	00:00 Hours	00:00 Hours	24:00 Hours
NSQF Level 3 Module 4: Ensuring food safety and personal hygiene	04:00 Hours	08:00 Hours	00:00 Hours	00:00 Hours	12:00 Hours
Module 5: Managing accidents and emergencies	04:00 Hours	08:00 Hours	00:00 Hours	00:00 Hours	12:00 Hours
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 6: 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 7: Material conservation	04:00 Hours	08:00 Hours	00:00 Hours	00:00 Hours	12:00 Hours
Module 8: Energy/ electricity conservation	04:00 Hours	08:00 Hours	00:00 Hours	00:00 Hours	12:00 Hours
Module 9: Waste management/recycling	04:00 Hours	08:00 Hours	00:00 Hours	00:00 Hours	12:00 Hours
Total Duration	128:00 Hours	252:00 Hours	00:00 Hours	00:00 Hours	380:00 Hours





Module Details

Module 1: Introduction to the food processing sector and job role of Industrial Baker

Bridge Module

Terminal Outcomes:

- Describe the food processing sector in brief
- Discuss the roles and responsibilities of an Industrial Baker

Duration: 08:00	Duration: 00:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
 Theory – Key Learning Outcomes Discuss the size and scope of the food processing industry in brief. Discuss the future trends and career growth opportunities available to the industrial bakers in food processing industry. Summarise the key roles and responsibilities of an 'Industrial Baker'. List the various terminologies used by bakers in the food processing industry. Discuss various organisational policies and procedures followed in the job. 	
 List the sequence of tasks performed for baking. Discuss the standards to be followed for 	
handling hazards and ensuring a clean work area.	

Classroom Aids

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

Tools, Equipment and Other Requirements

NIL





Module 2: Prepare for production *Mapped to NOS/N9026 v 1.0*

Terminal Outcomes:

Duration: 12:00

• Discuss the standard practices to be followed by an industrial baker for planning the production

Duration: 32:00

• Demonstrate the tasks to be performed for planning the production

Duration. 12.00	Duration, 32.00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
 Elucidate production planning process. List the manpower and material requirements as per work requirement. Discuss the importance of various process charts, product flow charts, resource management process, etc. List the priority of tasks as per work schedule. Recall the steps to plan capacity utilization of machinery with respect to the processing time, production order and batch size for each product. List down the basic concept of food safety and hygiene. List the tools, equipment and production materials required. Recall various steps required to organize production materials appropriately. 	 Demonstrate the procedure for obtaining work requirements from supervisors. Prepare samples to plan and prioritize work schedules Demonstrate how to estimate the resources as per the requirement (raw materials, packaging materials, machineries, and manpower) Employ appropriate practices to plan capacity utilization of machineries Carry out cleaning and maintaining the work area following organizational procedures. Perform cleaning of machines and tools and sanitize them following the organization's specifications and standards. Demonstrate how to dispose of the waste material at the designated place, safely. Inspect the tools, equipment and machinery to ascertain suitability for use. Report information such as faulty tools and equipment to the concerned authority. Demonstrate how to organize production materials appropriately. Demonstrate how to allot responsibilities to the helpers.
Classroom Aids	

Classroom Aids

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

Tools, Equipment and Other Requirements

Process related documents, Baking Sheet and Rack, Proof Box, Refrigerator, Commercial Mixer, Wire Whisker, Packaging Machine, Protective Gloves, Head Caps





Ovens (Diesel), Ovens (Gas), Ovens(Elec.) Ovens(Wood) Baking sheet & Racks, Commercial Mixers, Wire whiskers, Baking Pan, Cooling racks, Measuring Cup & spoon, Thermometer, Digital Hygrometer, 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: Produce baked products in industrial units Mapped to NOS/ FIC/N5003 v 2.0

- Discuss the process for producing different types of bakery items
- Demonstrate the standard practices followed to produce different bakery items

Duration: 52:00	Duration : 160:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
 Discuss various organizational policies, procedures and standards followed in a bakery processing unit. List the process parameters for different products. List the types of products produced and role of each ingredient used in it. Recall the process of measuring and mixing the ingredients. Recall how to mould the dough/batter and sift the ingredients as per requirement. List the control parameters of the mixer. Define the mixing time and temperature depending on the dough/batter's consistency. Discuss the process of setting and controlling the time and temperature of fermentation of the dough/batter depending on product requirement. Explain the importance of optimum weight, consistency and texture of the dough for the rounding step. Discuss the varieties of cookies, pastry and other baked items and types of machineries used. Discuss the recommendations of quality assurance team and complete the packaging. List essential packaging equipment required in baking production plants. 	 Perform weighing and measuring of all ingredients like flour, fat, water, sugar, cream, additives, flavours, spices, etc. required for product/batch. Demonstrate how to carry out grinding and sifting of ingredients as per requirement. Demonstrate how to mix the dry and wet ingredients and ensure the consistency of the dough before rounding step. Perform the loading of the ingredients into the mixer as per recipe requirements. Show how to check the weight, consistency and the texture of the dough before the rounding process. Show how to set the control of the laminator machine. Show how to set controls of the moulder die, rotary machine and cutting machine to produce bakery dough products of desired shape and size. Demonstrate the feeding of the dough into the layering/forming/moulding machines or dough feeder for the production of baked products. Show how to grease the die/mould and transfer the batter appropriately. Perform centre filling of dough/batter to meet product type. Demonstrate the second fermentation and proofing process in required products. Show how to set controls of the oven and load pans into the oven. Demonstrate the baking of pastry products, soft cookie doughs, filled and two-dough
	cookies etc. through dough extrusion.





- Show how to set, control and maintain speed of the cooling conveyor.
- Show how to set controls of the sandwiching machines and transfer the products into the machine.
- Check the physical parameters of finished products as well as overfilling or underfilling of cream.
- Demonstrate the process to unload/de-pan the baked products to cool.
- Check and identify faults in the baked items and rectify them.
- Perform the process to dispose the waste as per organisation standards.
- Demonstrate the procedure to send the products to quality lab for analysis.
- Perform packaging by following the method laid out by Legal Metrology Act, 2009.
- Perform primary packaging, secondary packaging, tertiary packaging and quaternary packaging depending on the type of produce.
- Show how to select and evaluate packaging materials.
- Show how to set the parameters of the packaging machine.
- Demonstrate the procedure to provide information in the labels.
- Conduct test to decide the shelf-life of baked products and select the packaging material accordingly.
- Prepare sample packaging of finished products.
- Demonstrate the procedure to send the samples to quality assurance team and receive the inputs on the packed samples.
- Show how to document and maintain records of raw materials, process parameters and finished products.
- Demonstrate the process to send the products to the storage area for dispatch.
- Exhibit the procedure to discard unapproved/waste samples.

Classroom Aids





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

Tools, Equipment and Other Requirements

Oven, Baking Sheet and Rack, Proof Box, Refrigerator, Commercial Mixer, Wire Whisker, Packaging Machine, Protective Gloves, Head Caps

Ovens (Diesel), Ovens (Gas), Ovens(Elec.) Ovens(Wood) Baking sheet & Racks, Commercial Mixers, Wire whiskers, Baking Pan, Cooling racks, Measuring Cup & spoon, Thermometer, Digital Hygrometer, 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 4: Implement health and safety practices at the workplace *Mapped to FIC/N9901v 1.0*

Terminal Outcomes:

- Discuss the importance of health and safety at the workplace
- Demonstrate the tasks to be performed for ensuring health and safety at the workplace

Duration: 12:00 Duration: 19:00 Theory – Key Learning Outcomes Practical – Key Learning Outcomes

- 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.

 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 5: Managing accidents and emergencies *Mapped to FIC/N9901 v1.0*

- 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

effectively	
Duration: 04:00	Duration: 08:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
 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 shock, bleeding, breaks to bones, minor 	 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.





- burns, resuscitation, poisoning, eye injuries, etc.
- 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 6: Work effectively in an organization Mapped to FIC/N9902v 1.0

- 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
 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 disability (PwD). 	 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.





- Discuss the applicable laws, acts and provisions defined for PwD by the statutory bodies.
- State the importance of gender sensitivity and equality.
- Discuss the applicable legislations, grievance redressal mechanisms, and penalties against harassment at the workplace.
- State the importance of transacting with others without personal bias.

Classroom Aids:

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

Tools, Equipment and Other Requirements

Nil





Module 7: Material Conservation *Mapped to SGJ/N1702 v 1.0*

Terminal Outcomes:

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

Duration: 04:00	Duration: 08:00	
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes	
 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. 	 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		

Materials and tools and equipment used at work





Module 8: 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
 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. 	 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 Pro	esentation and software, Facilitator's Guide,
Participant's Handbook	
Tools, Equipment and Other Requirements	
Energy saving devices	





Module 9: Waste management/recycling Mapped to SGJ/N1702, v1.0

Tools, Equipment and Other Requirements

Non-recyclable, recyclable waste bins

- 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
 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. 	 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 Pro	esentation, Facilitator's Guide, Participant's
Handbook	





Module 10: Employability and Entrepreneurship skills

Bridge Module

- 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		
 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 ecommerce 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 Describe the traits of successful entrepreneur List the types of enterprises 	 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. 		





- 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

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White board/Chart papers, marker.

Tools, Equipment and Other Requirements

NIL





Annexure

Trainer Requirements

Trainer Prerequisites						
Minimum Educational	Specialization	Relevant Industry Experience		Training Experience		Remarks
Qualification		Years	Specialization	Years	Specialization	
Class 10	Bakery Industry	4	Bread and Bakery Industry	3	Training of Industrial baker	

Trainer Certification				
Domain Certification	Platform Certification			
Certified for Job Role: "Industrial baker" mapped to QP: "FIC/Q0000, 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	Specialization	Releva Experi	ant Industry ience	Trainir Experi	ng/Assessment ence	Remarks
Qualification		Years	Specialization	Years	Specialization	
Class 10	Bakery Industry	4	Bread and Bakery Industry	3	Assessment of Industrial baker	

Assessor Certification				
Domain Certification	Platform Certification			
Certified for Job Role: "Industrial Baker" mapped to QP: "FIC/Q0000, 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.

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

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

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

A. Mid-term assessment

B. Term / Final Assessment

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

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

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

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





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
СОР	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