Qualification Pack

Packing Machine Operator-Food Industry

QP Code: FIC/Q7002

Version: 4.0

NSQF Level: 3

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FIC/Q7002: Packing Machine Operator-Food Industry

Brief Job Description

A Packing Machine Operator-Food Industry is responsible for packing different types of processed food products using a variety of packing machines. The individual loads the food products and packaging materials in the packing machine and carries out primary, secondary and tertiary packing. The person is also responsible for preparing the packing machine for use and carrying out its basic repair and maintenance. The individual works under supervision as per the given instructions.

Personal Attributes

The individual should be quality-conscious, alert and physically active with the capability to work for long durations. The person should have problem-solving, coordination and basic verbal and written communication skills.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. FIC/N7025: Prepare to operate different types of food packing machines

2. FIC/N7024: Operate different types of packing machines for various food products

3. FIC/N9906: Apply food safety guidelines in Food Processing

4. DGT/VSQ/N0101: Employability Skills (30 Hours)

Qualification Pack (QP) Parameters

Sector	Food Processing
Sub-Sector	Fruits and Vegetables, Food Grain Milling, Dairy Products, Meat and Poultry, Fish and Sea Food, Bread and Bakery, Soya Food, Packaged Foods
Occupation	Packaging
Country	India
NSQF Level	3
Credits	10

Qualification Pack

Aligned to NCO/ISCO/ISIC Code	NC0-2015/3122.4100
Minimum Educational Qualification & Experience	10th grade pass (or Equivalent) OR 8th grade pass with 3 Years of experience in food processing OR Previous relevant Qualification of NSQF Level 2 with 3 Years of experience in food processing OR Previous relevant Qualification of NSQF Level 2.5 with 1.5 years of experience in food processing
Minimum Level of Education for Training in School	
Pre-Requisite License or Training	NA
Minimum Job Entry Age	16 Years
Last Reviewed On	NA
Next Review Date	22/10/2027
NSQC Approval Date	22/10/2024
Version	4.0
Reference code on NQR	QG-03-FI-03330-2024-V4-FICSI
NQR Version	4.0

Remarks:

NA

FIC/N7025: Prepare to operate different types of food packing machines

Description

This unit covers the preparations required for operating different types of food-packing machinery. It includes collecting the packaging materials and preparing the packing machines for use

Scope

The scope covers the following :

- Check the availability of resources for food packing
- Prepare the packing machine for operation
- Perform the test run for the packing machine

Elements and Performance Criteria

Check the availability of resources for food packing

To be competent, the user/individual on the job must be able to:

PC1. determine the packing requirements by speaking to the supervisor

PC2. coordinate with the supervisor for the availability of relevant packing equipment and packaging materials

PC3. assist in checking if the packaging material conforms to the applicable specifications and quality standards

PC4. check for the availability of necessary tools and equipment to attend to faults in case of packing machine breakdowns

Prepare the packing machine for operation

To be competent, the user/individual on the job must be able to:

PC5. check the packing machinery and other relevant equipment for any damage, wear, and proper functioning

PC6. ensure all safety guards and emergency stop buttons are in place and operational

PC7. carry out basic repair and maintenance of the packing machinery

PC8. coordinate with the supervisor for complex repair and maintenance needs

Perform the test run for the packing machine

To be competent, the user/individual on the job must be able to:

PC9. check the packing machine operating environment meets the necessary conditions such as temperature and humidity

PC10. load the packing material in the packing machine, aligning it properly

PC11. set the appropriate machine parameters, depending on the type of packing machine being used and the food product being packed

PC12. conduct a test run to verify that the product is being packed and sealed correctly

PC13. adjust the packing machine settings, as required, based on the test

PC14. assist in maintaining records of machine settings and any issues encountered during the setup

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. how different types of packing machines work, including their specific components and operational mechanisms

KU2. the working mechanism, use, regular maintenance, fault rectification and basic repair for different types of primary packaging machines, such as Vertical Form Fill Seal (VFFS) Machine, Horizontal Form Fill Seal (HFFS) machine, thermoforming machine, and vacuum packing machine

KU3. the working mechanism, use, regular maintenance, fault rectification and basic repair for different types of secondary packaging machines, such as the cartoning machine, case packing machine, tray packing machine, shrink wrap machines, etc

KU4. the working mechanism, use, regular maintenance, fault rectification and basic repair for different types of tertiary packaging machines, such as palletizing machine, strapping machine, etc

KU5. different types of material used with different types of packing machinery

KU6. the advantages and disadvantages of using different types of packing machines for packing processed food products

KU7. the electrical systems to manage power connections and troubleshoot electrical problems

KU8. different types of plastics, metals and other materials used in food packaging

KU9. how to set up and calibrate packing machines according to the product specifications and packaging requirements

KU10. the Standard Operating Procedures (SOPs) for starting, running, and shutting down the machines

KU11. the industry safety standards and regulations, including occupational health and safety guidelines

KU12. the emergency stop procedures and how to handle equipment malfunctions safely

KU13. the techniques to inspect packaging for quality assurance, ensuring that all packages meet the required standards

KU14. how to identify and rectify common packing errors such as misalignment, incorrect sealing, or labeling issues

KU15. the routine maintenance tasks to prevent breakdowns and prolong the life of the packing machines

KU16. the importance of following the machine manuals and operational guidelines provided by manufacturers

KU17. different resources required for the packing of processed food products

KU18. proper sanitation practices to prevent contamination of food products

KU19. how Hazard Analysis and Critical Control Points (HACCP) apply to food packing operations

Generic Skills (GS)

User/individual on the job needs to know how to:

GS1. maintain work-related notes and records

GS2. read the relevant literature to learn about the latest developments in the field of work

GS3. listen attentively to understand the information/ instructions being shared by the speaker

GS4. communicate clearly and politely with co-workers and clients

GS5. coordinate with co-workers to achieve work objectives

GS6. plan and prioritize tasks to ensure timely completion

GS7. identify possible disruptions to work and take appropriate preventive measures

GS8. take quick decisions to deal with workplace emergencies/ accidents

GS9. evaluate all possible solutions to a problem to select the best one

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Check the availability of resources for food packing	**8**	**12**	**-**	**4**
PC1. determine the packing requirements by speaking to the supervisor	2	3	-	1
PC2. coordinate with the supervisor for the availability of relevant packing equipment and packaging materials	2	3	-	1
PC3. assist in checking if the packaging material conforms to the applicable specifications and quality standards	2	3	-	1
PC4. check for the availability of necessary tools and equipment to attend to faults in case of packing machine breakdowns	2	3	-	1
Prepare the packing machine for operation	**8**	**12**	**-**	**4**
PC5. check the packing machinery and other relevant equipment for any damage, wear, and proper functioning	2	3	-	1
PC6. ensure all safety guards and emergency stop buttons are in place and operational	2	3	-	1
PC7. carry out basic repair and maintenance of the packing machinery	2	3	-	1
PC8. coordinate with the supervisor for complex repair and maintenance needs	2	3	-	1
Perform the test run for the packing machine	**14**	**26**	**-**	**12**
PC9. check the packing machine operating environment meets the necessary conditions such as temperature and humidity	4	6	-	2
PC10. load the packing material in the packing machine, aligning it properly	2	4	-	2
PC11. set the appropriate machine parameters, depending on the type of packing machine being used and the food product being packed	2	4	-	2

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. conduct a test run to verify that the product is being packed and sealed correctly	2	4	-	2
PC13. adjust the packing machine settings, as required, based on the test	2	4	-	2
PC14. assist in maintaining records of machine settings and any issues encountered during the setup	2	4	-	2
NOS Total	**30**	**50**	**-**	**20**

National Occupational Standards (NOS) Parameters

NOS Code	FIC/N7025
NOS Name	Prepare to operate different types of food packing machines
Sector	Food Processing
Sub-Sector	
Occupation	Packaging
NSQF Level	3
Credits	2
Version	1.0
Last Reviewed Date	22/10/2024
Next Review Date	22/10/2027
NSQC Clearance Date	22/10/2024

FIC/N7024: Operate different types of packing machines for various food products

Description

This unit is about operating different types of packing machines to pack a variety of processed food products

Scope

The scope covers the following :

- Carry out primary packaging of food products
- Carry out secondary packaging of food products
- Carry out tertiary packaging of food products
- Carry out post-production activities

Elements and Performance Criteria

Carry out primary packaging of food products

To be competent, the user/individual on the job must be able to:

PC1. check the packaging area is clean and organised to maintain food safety standards

PC2. assemble the components of the Clean-out-of-Place (COP) equipment properly

PC3. sterilize the relevant equipment, such as Ultra-high Temperature (UHT) units, before using them for packing operations

PC4. perform integrity testing on the packaging materials as per operational guidelines

PC5. sterilize the containers before using them for packing food products

PC6. feed food products and primary packaging materials, such as sheets, boxes, cans, plastic rolls, cardboard, and bottles, to the packaging machine

PC7. fill the packaging materials with food products manually or using appropriate automated equipment

PC8. seal/cap the filled packaging material following the packing machine user guidelines

PC9. regulate the speed of packaging to ensure efficient packing operations

PC10. monitor the temperature of food products during packing to ensure they are packed at safe temperatures to maintain their quality

PC11. monitor the equipment temperature and take appropriate corrective measures in case of deviations from the normal temperature

PC12. carry out labelling of the filled/packed primary packaging material

PC13. check if food products are packaged according to the applicable specifications

PC14. identify, segregate and label the non-standard materials and packages that do not meet the specifications

PC15. maintain the supply of packing materials throughout the run

PC16. maintain the required output rates

PC17. identify discrepancies, non-standard output and any problems, and report them to supervisor for prompt resolution

PC18. hand over the standard and non-standard packed products as per the operational guidelines, with minimum damage

PC19. shut down the packing production line, during emergencies, as per the organisational procedure

Carry out secondary packaging of food products

To be competent, the user/individual on the job must be able to:

PC20. use food-grade secondary packaging that complies with applicable safety standards

PC21. collect the required secondary packaging materials, e.g. corrugated cardboard, shrink wrap film, stretch wrap film, paperboard, plastic containers, and tools

PC22. check the primary packaged items are sealed and labelled correctly

PC23. arrange the primary packaged products into groups as instructed and pack them in secondary packaging

PC24. seal the secondary packaging using appropriate sealing methods

PC25. carry out labelling of the secondary packaging with the necessary information, e.g. product details, batch number, expiration date, etc

PC26. secure the packaged items, as required

PC27. examine the finished secondary packaging for any defects or issues and take necessary corrective measures, as instructed

Carry out tertiary packaging of food products

To be competent, the user/individual on the job must be able to:

PC28. check the primary packages are grouped and packed appropriately in the secondary packaging

PC29. set appropriate parameters in the tertiary packing machine

PC30. feed the tertiary packaging materials and secondary packed products in the packing machine

PC31. carry out bulk tertiary packaging of packed cartons at the speed to ensure proper packaging

PC32. remove tertiary packed product safely from the packaging machine

PC33. weigh the packed products after tertiary packaging to ensure correct weight

PC34. examine the tertiary packaging material for damage and take appropriate corrective measures, as required

PC35. assist in checking all packaging complies with regulatory standards and company policies

PC36. adhere to the organisational and FSSAI standards and procedures concerning food processing, packaging, and the operation of food product packing machinery

Carry out post-production activities

To be competent, the user/individual on the job must be able to:

PC37. store the packaged products in a pest-controlled environment, at the appropriate temperature and humidity

PC38. handle the packages safely, using appropriate equipment to avoid damage

PC39. clean the packing machinery and other tools and equipment using the recommended cleaning agents and sanitizers

PC40. follow the appropriate clean-in-place procedure

PC41. clean the work area after packaging operations to remove dust, spillage, pests, etc

PC42. check the packing machinery and carry out basic repairs, as required

PC43. ensure periodic maintenance of all machinery and equipment as per the manufacturer's instructions/manuals

PC44. carry out appropriate documentation concerning the packing machine operations

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. FSSAI regulations on food packaging and labelling

KU2. the legal metrology regulations concerning pre-packaged commodities

KU3. the basic food microbiology

KU4. the quality assessment of processed food products based on different parameters

KU5. Good Manufacturing Practices (GMPs) concerning food products, including the use of relevant protective equipment

KU6. the purpose and principles of the packaging process

KU7. different types of primary packaging materials, e.g. sheets, boxes, cans, plastic rolls, paper, cardboard, cloth or metal, bottles, etc

KU8. different types of secondary packaging materials, e.g. corrugated cardboard, shrink wrap film, stretch wrap film, paperboard, plastic containers, etc

KU9. different types of tertiary packaging materials, e.g. wooden/ plastic/ metal pallets, stretch wrap film, shrink wrap film, Polypropylene (PP)/ Polyester (PET)/ steel straps, paperboard edge protectors, plastic corner boards, etc

KU10. different types of packaged processed food items

KU11. the specific handling requirements of different packaging materials

KU12. the storage and inventory of packaging materials to ensure a continuous supply

KU13. how to operate different types of processed food packing machines, including the relevant machine and process controls

KU14. the basic mathematics to calculate the packing materials required for an order

KU15. the environmental requirements for the packing of different processed food items

KU16. the aseptic packaging line

KU17. different types of aseptic packaging systems, such as fill and seal, erect, fill and seal, thermoform, fill and seal, blow mold, and fill and seal

KU18. the types of packaging materials used in aseptic packaging and their interactions with food

KU19. how to identify the packing material specifications

KU20. how to obtain the food items and packing materials in a production facility

KU21. the quality criteria required to be checked before packing various types of processed food items, including the packing materials

KU22. how to load, position or feed the food product and packing material(s) in the packing machine

KU23. the operating parameters in different types of packing machines and the aspects they impact

KU24. how to enter the operating parameters into the packing machine

KU25. the importance of obtaining a sample and inspecting it against the applicable standards before initiating the production process

KU26. the machine sequence for packing operations

KU27. the operations of different packing machines, such as form, fill, seal machines, auger filling, band sealer etc

KU28. the importance of maintaining the appropriate temperature and humidity for the proper functioning of packing machines

KU29. the quality parameters to be checked during and after packing to ensure adherence to packaging standards

KU30. the indicators of faulty packaging and how to address them

KU31. how to identify and address the common issues experienced with the packing machines and processes

KU32. the safety and hygiene precautions for the packing operation of various types of processed food items

KU33. the contamination/food safety risks related to different stages in the packaging process and related control measures

KU34. how to monitor and maintain the levels of packing materials in the packing machine

KU35. how to perform the emergency and routine shutdowns on the packing machines

KU36. the environmental regulations regarding the disposal of packaging materials and waste management

KU37. the applicable documentation requirements, including machine maintenance, production batches,quality control checks, etc

Generic Skills (GS)

User/individual on the job needs to know how to:

GS1. maintain work-related notes and records

GS2. read the relevant literature to learn about the latest developments in the field of work

GS3. listen attentively to understand the information/ instructions being shared by the speaker

GS4. communicate clearly and politely with co-workers and clients

GS5. coordinate with co-workers to achieve work objectives

GS6. plan and prioritize tasks to ensure timely completion

GS7. identify possible disruptions to work and take appropriate preventive measures

GS8. take quick decisions to deal with workplace emergencies/ accidents

GS9. evaluate all possible solutions to a problem to select the best one

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Carry out primary packaging of food products	**10**	**20**	**-**	**9**
PC1. check the packaging area is clean and organised to maintain food safety standards	1	1	-	0.5
PC2. assemble the components of the Clean-out-of-Place (COP) equipment properly	0.5	1	-	0.5
PC3. sterilize the relevant equipment, such as Ultra-high Temperature (UHT) units, before using them for packing operations	0.5	1	-	0.5
PC4. perform integrity testing on the packaging materials as per operational guidelines	0.5	1	-	0.5
PC5. sterilize the containers before using them for packing food products	0.5	1	-	0.5
PC6. feed food products and primary packaging materials, such as sheets, boxes, cans, plastic rolls, cardboard, and bottles, to the packaging machine	0.5	1	-	0.5
PC7. fill the packaging materials with food products manually or using appropriate automated equipment	0.5	2	-	0.5
PC8. seal/cap the filled packaging material following the packing machine user guidelines	0.5	1	-	0.5
PC9. regulate the speed of packaging to ensure efficient packing operations	0.5	1	-	0.5
PC10. monitor the temperature of food products during packing to ensure they are packed at safe temperatures to maintain their quality	0.5	1	-	0.5
PC11. monitor the equipment temperature and take appropriate corrective measures in case of deviations from the normal temperature	0.5	1	-	0.5
PC12. carry out labelling of the filled/packed primary packaging material	0.5	1	-	0.5

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC13. check if food products are packaged according to the applicable specifications	0.5	1	-	0.5
PC14. identify, segregate and label the non-standard materials and packages that do not meet the specifications	0.5	1	-	0.5
PC15. maintain the supply of packing materials throughout the run	0.5	1	-	0.5
PC16. maintain the required output rates	0.5	1	-	0.5
PC17. identify discrepancies, non-standard output and any problems, and report them to supervisor for prompt resolution	0.5	1	-	0.5
PC18. hand over the standard and non-standard packed products as per the operational guidelines, with minimum damage	0.5	1	-	-
PC19. shut down the packing production line, during emergencies, as per the organisational procedure	0.5	1	-	0.5
Carry out secondary packaging of food products	**6**	**10**	**-**	**3**
PC20. use food-grade secondary packaging that complies with applicable safety standards	1	1	-	-
PC21. collect the required secondary packaging materials, e.g. corrugated cardboard, shrink wrap film, stretch wrap film, paperboard, plastic containers, and tools	0.5	1	-	0.5
PC22. check the primary packaged items are sealed and labelled correctly	1	1	-	0.5
PC23. arrange the primary packaged products into groups as instructed and pack them in secondary packaging	0.5	1	-	0.5
PC24. seal the secondary packaging using appropriate sealing methods	1	2	-	0.5
PC25. carry out labelling of the secondary packaging with the necessary information, e.g. product details, batch number, expiration date, etc	1	2	-	0.5

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC26. secure the packaged items, as required	0.5	1	-	-
PC27. examine the finished secondary packaging for any defects or issues and take necessary corrective measures, as instructed	0.5	1	-	0.5
Carry out tertiary packaging of food products	**8**	**12**	**-**	**4**
PC28. check the primary packages are grouped and packed appropriately in the secondary packaging	1	1	-	0.5
PC29. set appropriate parameters in the tertiary packing machine	1	2	-	0.5
PC30. feed the tertiary packaging materials and secondary packed products in the packing machine	1	1	-	0.5
PC31. carry out bulk tertiary packaging of packed cartons at the speed to ensure proper packaging	1	2	-	0.5
PC32. remove tertiary packed product safely from the packaging machine	1	1	-	0.5
PC33. weigh the packed products after tertiary packaging to ensure correct weight	0.5	1	-	0.5
PC34. examine the tertiary packaging material for damage and take appropriate corrective measures, as required	1	2	-	0.5
PC35. assist in checking all packaging complies with regulatory standards and company policies	1	1	-	-
PC36. adhere to the organisational and FSSAI standards and procedures concerning food processing, packaging, and the operation of food product packing machinery	0.5	1	-	0.5
Carry out post-production activities	**6**	**8**	**-**	**4**
PC37. store the packaged products in a pest-controlled environment, at the appropriate temperature and humidity	1	1	-	0.5
PC38. handle the packages safely, using appropriate equipment to avoid damage	1	1	-	0.5

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC39. clean the packing machinery and other tools and equipment using the recommended cleaning agents and sanitizers	1	1	-	0.5
PC40. follow the appropriate clean-in-place procedure	0.5	1	-	0.5
PC41. clean the work area after packaging operations to remove dust, spillage, pests, etc	0.5	1	-	0.5
PC42. check the packing machinery and carry out basic repairs, as required	1	1	-	0.5
PC43. ensure periodic maintenance of all machinery and equipment as per the manufacturer's instructions/manuals	0.5	1	-	0.5
PC44. carry out appropriate documentation concerning the packing machine operations	0.5	1	-	0.5
NOS Total	**30**	**50**	**-**	**20**

National Occupational Standards (NOS) Parameters

NOS Code	FIC/N7024
NOS Name	Operate different types of packing machines for various food products
Sector	Food Processing
Sub-Sector	Fruits and Vegetables, Food Grain Milling, Dairy Products, Meat and Poultry, Fish and Sea Food, Bread and Bakery, Alcoholic Beverages, Aerated Water/Soft Drinks, Soya Food, Packaged Foods
Occupation	Packaging
NSQF Level	3
Credits	6
Version	2.0
Last Reviewed Date	22/10/2024
Next Review Date	22/10/2027
NSQC Clearance Date	22/10/2024

FIC/N9906: Apply food safety guidelines in Food Processing

Description

This unit covers the essential components of food safety, Good Manufacturing Practices (GMP), and personal hygiene in the food industry. It emphasizes the importance of individuals working in the food industry in protecting the health and well-being of consumers by following food safety protocols and procedures and ensuring the production of safe and high-quality food products.

Scope

The scope covers the following :

- Apply personal hygiene and follow Good Manufacturing practices at the workplace.
- Implement Food Safety and pre-requisite programs (PRP) at the workplace.

Elements and Performance Criteria

Apply personal hygiene and follow Good Manufacturing practices at workplace

To be competent, the user/individual on the job must be able to:

PC1. PC1. follow a site relevant documented procedure for Personal Hygiene and Visitor/ Contractor rules.

PC2. PC2. follow work instructions at levels of employees inside a food manufacturing site and ensure that the relevant instructions are well communicated and being followed at the fixed timelines.

PC3. PC3. ensure timely participate and carry out the relevant training and awareness sessions on personal hygiene, GMP, and related topics.

PC4. PC4.ensure timely medical examination from a prescribed and authorized doctor and comply with the guidelines of Schedule IV as described in Food Safety Standard Authority of India (FSSAI) guidelines.

PC5. PC5. fill in data in the daily monitoring checklist related to personal hygiene, food safety, and GMP.

PC6. • PC6. follow a site-relevant documented procedure and area-wise work instructions for Good Manufacturing Practices (GMP) to be followed on the site.
• procedure: Hand washing requirements, Gowning & De gowning protocols, cleaning, and sanitation of employee lockers, follow the protocols as laid down in the different categories of processing areas like Low Risk, High Risk, High Care areas, etc.

PC7. PC7. follow all validated Do's & Don'ts inside a food manufacturing firm.

PC8. PC8. follow man and materials movement throughout the production facility, to restrict unwanted hazards to cross-contaminate the products which are being manufactured in the facility.

PC9. PC9. refer to the process flow charts, HACCP summary plan, and critical process parameters in each and respective areas of the production line.

PC10. PC10. identify the material requirements such as manufacturing equipments, Utensils, and other processing aids, cleaning chemicals, and cleaning work instructions in all the relevant areas of the manufacturing facility. Also, a special focus shall be given to Allergens and their risks. Wherever required, the allergen requirements shall be separately addressed.

PC11. PC11. ensure to properly tag and number all the equipment, machinery, tools, and other processing aids to keep proper traceability of the product being manufactured and handled at the site.

PC12. PC12. follow and implement all training and awareness guidelines in the manufacturing area and regularly participate in training effectiveness for evaluation.

PC13. PC13. participate in audits and address the aspects of Good Manufacturing Procedures, personal hygiene, and food safety.

PC14. PC14. ensure the record keeping and documentation such as Daily Monitoring Sheets, Batch Traceability Records, machine records, product parameters, process control parameters, etc.

Implement food safety practices at the workplace

To be competent, the user/individual on the job must be able to:

PC15. PC15. maintain updated facilities, equipment, and tool and design requirements to minimize the risks associated with the products being handled at the site.

PC16. PC16. follow the instruction in the raw and packaging materials warehouse and ensure receiving material parameters match all the laid requirements. parameters: Incoming vehicles Visual report, storage, and handling requirements, hazardous and non-hazardous goods, allergens, cross-contamination risks, Quarantine, Accepted & rejected goods, monitoring temperature and humidity, etc.

PC17. PC17. follow FSSAI Schedule IV requirements related to Pest Control, Cleaning, and Sanitation, Utilities, Waste Disposal, Prevention of Cross-Contamination, allergen management, corrective action, preventive actions, food operation control etc.

PC18. PC18. ensure timely check of the critical control points and product parameters.

PC19. PC19. record keeping and documentation such as daily monitoring sheets, cleaning sheets, parameters, etc.

PC20. PC20. report any food safety and GMP issue to the supervisor, if any.

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. importance of personal hygiene, GMP, visitors & contractor's rules. Associated risk in case of deviation from the standard policies and how the requirement is linked with the site's FSSAI License.

KU2. KU2. importance of training and work instruction delivered by the supervisors.

KU3. KU3. importance of filling the records and checklists, formats and how to ensure that the timely and effective completion is achieved.

KU4. KU4. knowledge of trainings and skills required to perform in food processing premises.

KU5. KU5. understand FSSAI Schedule IV requirements of food handlers and PRPs within the processing area

KU6. KU6. importance of timely medical examinations and awareness of communicable diseases

KU7. Understanding of Do's & Don'ts, intellect mindset to understand the visual illustrations

KU8. KU8. understanding about Site Zoning plans.

KU9. KU9. awareness of layout which would help to demarcate the defined movements of RM, PM, FG, and wastes generated during the processing of goods. This one lays a framework to launch Good Manufacturing Practices (GMP) successfully and effectively on site.

KU10. KU10. understand the manufacturing process, product parameters and process control parameters such as CCPs

KU11. KU11. understanding about Hazard Analysis and Critical Control Points (HACCP)

KU12. KU12. understanding about Allergens and their types and controls to monitor effective handling of allergen raw materials on site.

KU13. KU13. basic understanding of traceability and mock recall

KU14. KU14. awareness about Internal & external Audits

KU15. KU15. understanding for RCA CAPA, cleaning and sanitation

KU16. KU16. awareness about record keeping and data monitoring in various sheets as per organizational requirement

Generic Skills (GS)

User/individual on the job needs to know how to:

GS1. GS1. read and comprehend basic content to read labels, charts, signages, symbols and product manuals

GS2. GS2. communicate with coworkers appropriately to clarify instructions and other issues

GS3. GS3. plan and organize the work schedule, work area, tools, equipment, and materials for improved productivity

GS4. GS4. plan and prioritize tasks as per work requirements

GS5. GS5. always be punctual and courteous

GS6. GS6. good observations and intellect mindset

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Apply personal hygiene and follow Good Manufacturing practices at workplace	**22**	**44**	**-**	**6**
PC1. PC1. follow a site relevant documented procedure for Personal Hygiene and Visitor/ Contractor rules.	2	4	-	-
PC2. PC2. follow work instructions at levels of employees inside a food manufacturing site and ensure that the relevant instructions are well communicated and being followed at the fixed timelines.	2	4	-	2
PC3. PC3. ensure timely participate and carry out the relevant training and awareness sessions on personal hygiene, GMP, and related topics.	2	4	-	-
PC4. PC4.ensure timely medical examination from a prescribed and authorized doctor and comply with the guidelines of Schedule IV as described in Food Safety Standard Authority of India (FSSAI) guidelines.	2	4	-	-
PC5. PC5. fill in data in the daily monitoring checklist related to personal hygiene, food safety, and GMP.	2	4	-	-
PC6. • PC6. follow a site-relevant documented procedure and area-wise work instructions for Good Manufacturing Practices (GMP) to be followed on the site. • procedure: Hand washing requirements, Gowning & De gowning protocols, cleaning, and sanitation of employee lockers, follow the protocols as laid down in the different categories of processing areas like Low Risk, High Risk, High Care areas, etc.	2	4	-	2
PC7. PC7. follow all validated Do's & Don'ts inside a food manufacturing firm.	1	2	-	1
PC8. PC8. follow man and materials movement throughout the production facility, to restrict unwanted hazards to cross-contaminate the products which are being manufactured in the facility.	2	4	-	-
PC9. PC9. refer to the process flow charts, HACCP summary plan, and critical process parameters in each and respective areas of the production line.	1	2	-	1

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC10. PC10. identify the material requirements such as manufacturing equipments, Utensils, and other processing aids, cleaning chemicals, and cleaning work instructions in all the relevant areas of the manufacturing facility. Also, a special focus shall be given to Allergens and their risks. Wherever required, the allergen requirements shall be separately addressed.	2	4	-	-
PC11. PC11. ensure to properly tag and number all the equipment, machinery, tools, and other processing aids to keep proper traceability of the product being manufactured and handled at the site.	1	2	-	-
PC12. PC12. follow and implement all training and awareness guidelines in the manufacturing area and regularly participate in training effectiveness for evaluation.	1	2	-	-
PC13. PC13. participate in audits and address the aspects of Good Manufacturing Procedures, personal hygiene, and food safety.	1	2	-	-
PC14. PC14. ensure the record keeping and documentation such as Daily Monitoring Sheets, Batch Traceability Records, machine records, product parameters, process control parameters, etc.	1	2	-	-
Implement food safety practices at the workplace	**8**	**16**	**-**	**4**
PC15. PC15. maintain updated facilities, equipment, and tool and design requirements to minimize the risks associated with the products being handled at the site.	2	4	-	-
PC16. PC16. follow the instruction in the raw and packaging materials warehouse and ensure receiving material parameters match all the laid requirements. parameters: Incoming vehicles Visual report, storage, and handling requirements, hazardous and non-hazardous goods, allergens, cross-contamination risks, Quarantine, Accepted & rejected goods, monitoring temperature and humidity, etc.	1	2	-	1

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC17. PC17. follow FSSAI Schedule IV requirements related to Pest Control, Cleaning, and Sanitation, Utilities, Waste Disposal, Prevention of Cross-Contamination, allergen management, corrective action, preventive actions, food operation control etc.	2	4	-	2
PC18. PC18. ensure timely check of the critical control points and product parameters.	1	2	-	-
PC19. PC19. record keeping and documentation such as daily monitoring sheets, cleaning sheets, parameters, etc.	1	2	-	1
PC20. PC20. report any food safety and GMP issue to the supervisor, if any.	1	2	-	-
NOS Total	**30**	**60**	**-**	**10**

National Occupational Standards (NOS) Parameters

NOS Code	FIC/N9906
NOS Name	Apply food safety guidelines in Food Processing
Sector	Food Processing
Sub-Sector	Generic
Occupation	Generic
NSQF Level	3
Credits	1
Version	1.0
Last Reviewed Date	18/02/2025
Next Review Date	18/02/2028
NSQC Clearance Date	18/02/2025

DGT/VSQ/N0101: Employability Skills (30 Hours)

Description

This unit is about employability skills, Constitutional values, becoming a professional in the 21st Century, digital, financial, and legal literacy, diversity and Inclusion, English and communication skills, customer service, entrepreneurship, and apprenticeship, getting ready for jobs and career development.

Scope

The scope covers the following :

- Introduction to Employability Skills
- Constitutional values - Citizenship
- Becoming a Professional in the 21st Century
- Basic English Skills
- Communication Skills
- Diversity & Inclusion
- Financial and Legal Literacy
- Essential Digital Skills
- Entrepreneurship
- Customer Service
- Getting ready for Apprenticeship & Jobs

Elements and Performance Criteria

Introduction to Employability Skills

To be competent, the user/individual on the job must be able to:

PC1.   understand the significance of employability skills in meeting the job requirements

Constitutional values – Citizenship

To be competent, the user/individual on the job must be able to:

PC2.   identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices

Becoming a Professional in the 21st Century

To be competent, the user/individual on the job must be able to:

PC3.   explain 21st Century Skills such as Self-Awareness, Behavior Skills, Positive attitude, self-motivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset etc.

Basic English Skills

To be competent, the user/individual on the job must be able to:

PC4.   speak with others using some basic English phrases or sentences

Communication Skills

To be competent, the user/individual on the job must be able to:

PC5.   follow good manners while communicating with others

PC6.   work with others in a team

Diversity & Inclusion

To be competent, the user/individual on the job must be able to:

PC7.   communicate and behave appropriately with all genders and PwD

PC8.   report any issues related to sexual harassment

Financial and Legal Literacy

To be competent, the user/individual on the job must be able to:

PC9.   use various financial products and services safely and securely

PC10. calculate income, expenses, savings etc.

PC11. approach the concerned authorities for any exploitation as per legal rights and laws

Essential Digital Skills

To be competent, the user/individual on the job must be able to:

PC12. operate digital devices and use its features and applications securely and safely

PC13. use internet and social media platforms securely and safely

Entrepreneurship

To be competent, the user/individual on the job must be able to:

PC14. identify and assess opportunities for potential business

PC15. identify sources for arranging money and associated financial and legal challenges

Customer Service

To be competent, the user/individual on the job must be able to:

PC16. identify different types of customers

PC17. identify customer needs and address them appropriately

PC18. follow appropriate hygiene and grooming standards

Getting ready for apprenticeship & Jobs

To be competent, the user/individual on the job must be able to:

PC19. create a basic biodata

PC20. search for suitable jobs and apply

PC21. identify and register apprenticeship opportunities as per requirement

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1.   need for employability skills

KU2.   various constitutional and personal values

KU3.   different environmentally sustainable practices and their importance

KU4.   Twenty first (21st) century skills and their importance

KU5.   how to use basic spoken English language

KU6.   Do and dont of effective communication

KU7.   inclusivity and its importance

KU8.   different types of disabilities and appropriate communication and behaviour towards PwD

KU9.   different types of financial products and services

KU10. how to compute income and expenses

KU11. importance of maintaining safety and security in financial transactions

KU12. different legal rights and laws

KU13. how to operate digital devices and applications safely and securely

KU14. ways to identify business opportunities

KU15. types of customers and their needs

KU16. how to apply for a job and prepare for an interview

KU17. apprenticeship scheme and the process of registering on apprenticeship portal

Generic Skills (GS)

User/individual on the job needs to know how to:

GS1. communicate effectively using appropriate language

GS2. behave politely and appropriately with all

GS3. perform basic calculations

GS4. solve problems effectively

GS5. be careful and attentive at work

GS6. use time effectively

GS7. maintain hygiene and sanitisation to avoid infection

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Introduction to Employability Skills	**1**	**1**	**-**	**-**
PC1. understand the significance of employability skills in meeting the job requirements	-	-	-	-
Constitutional values – Citizenship	**1**	**1**	**-**	**-**
PC2. identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices	-	-	-	-
Becoming a Professional in the 21st Century	**1**	**3**	**-**	**-**
PC3. explain 21st Century Skills such as Self-Awareness, Behavior Skills, Positive attitude, self-motivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset etc.	-	-	-	-
Basic English Skills	**2**	**3**	**-**	**-**
PC4. speak with others using some basic English phrases or sentences	-	-	-	-
Communication Skills	**1**	**1**	**-**	**-**
PC5. follow good manners while communicating with others	-	-	-	-
PC6. work with others in a team	-	-	-	-
Diversity & Inclusion	**1**	**1**	**-**	**-**
PC7. communicate and behave appropriately with all genders and PwD	-	-	-	-
PC8. report any issues related to sexual harassment	-	-	-	-
Financial and Legal Literacy	**3**	**4**	**-**	**-**
PC9. use various financial products and services safely and securely	-	-	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC10. calculate income, expenses, savings etc.	-	-	-	-
PC11. approach the concerned authorities for any exploitation as per legal rights and laws	-	-	-	-
Essential Digital Skills	**4**	**6**	**-**	**-**
PC12. operate digital devices and use its features and applications securely and safely	-	-	-	-
PC13. use internet and social media platforms securely and safely	-	-	-	-
Entrepreneurship	**3**	**5**	**-**	**-**
PC14. identify and assess opportunities for potential business	-	-	-	-
PC15. identify sources for arranging money and associated financial and legal challenges	-	-	-	-
Customer Service	**2**	**2**	**-**	**-**
PC16. identify different types of customers	-	-	-	-
PC17. identify customer needs and address them appropriately	-	-	-	-
PC18. follow appropriate hygiene and grooming standards	-	-	-	-
Getting ready for apprenticeship & Jobs	**1**	**3**	**-**	**-**
PC19. create a basic biodata	-	-	-	-
PC20. search for suitable jobs and apply	-	-	-	-
PC21. identify and register apprenticeship opportunities as per requirement	-	-	-	-
NOS Total	**20**	**30**	**-**	**-**

National Occupational Standards (NOS) Parameters

NOS Code	DGT/VSQ/N0101
NOS Name	Employability Skills (30 Hours)
Sector	Cross Sectoral
Sub-Sector	Professional Skills
Occupation	Employability
NSQF Level	2
Credits	1
Version	1.0
Last Reviewed Date	08/05/2025
Next Review Date	08/05/2028
NSQC Clearance Date	08/05/2025

Assessment Guidelines and Assessment Weightage

Assessment Guidelines

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Element/ 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 Element/ 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, and where applicable, on the selected elective/option NOS/set of NOS.

4. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below).

5. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training center based on these criteria.

6. To pass the Qualification Pack assessment, every trainee should score the Recommended Pass % aggregate for the QP.

7. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack.

Minimum Aggregate Passing % at QP Level : 50

(**Please note**: Every Trainee should score a minimum aggregate passing percentage as specified above, to successfully clear the Qualification Pack assessment.)

Assessment Weightage

Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
FIC/N7025.Prepare to operate different types of food packing machines	30	50	-	20	100	40
FIC/N7024.Operate different types of packing machines for various food products	30	50	-	20	100	40
FIC/N9906.Apply food safety guidelines in Food Processing	30	60	-	10	100	10
DGT/VSQ/N0101.Employability Skills (30 Hours)	20	30	-	-	50	10
Total	**110**	**190**	**-**	**50**	**350**	**100**

Acronyms

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training
NCVET	National Council for Vocational Education and Training
FICSI	Food Industry Capacity & Skill Initiative
QP	Qualification Pack
MC	Model Curriculum
NSQF	National Skills Qualification Framework
NSQC	National Skills Qualification Committee
NOS	National Occupational Standards
NCO	National Classification of Occupations
ES	Employability Skills
HACCP	Hazard Analysis and Critical Control Points
FSSAI	Food Safety and Standards Authority of India
GMPs	Good Manufacturing Practices
PPE	Personal Protective Equipment
VFFS	Vertical Form Fill Seal
HFFS	Horizontal Form Fill Seal

Glossary

Sector	Sector is a conglomeration of different business operations having similar business and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
Occupation	Occupation is a set of job roles, which perform similar/ related set of functions in an industry.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
Occupational Standards (OS)	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the Knowledge and Understanding (KU) they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria (PC)	Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
National Occupational Standards (NOS)	NOS are occupational standards which apply uniquely in the Indian context.
Qualifications Pack (QP)	QP comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A QP is assigned a unique qualifications pack code.
Unit Code	Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'
Unit Title	Unit title gives a clear overall statement about what the incumbent should be able to do.
Description	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
Scope	Scope is a set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on quality of performance required.
Knowledge and Understanding (KU)	Knowledge and Understanding (KU) are statements which together specify the technical, generic, professional and organisational specific knowledge that an individual needs in order to perform to the required standard.

Organisational Context	Organisational context includes the way the organisation is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
Technical Knowledge	Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
Core Skills/ Generic Skills (GS)	Core skills or Generic Skills (GS) are a group of skills that are the key to learning and working in today's world. These skills are typically needed in any work environment in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles.
Electives	Electives are NOS/set of NOS that are identified by the sector as contributive to specialization in a job role. There may be multiple electives within a QP for each specialized job role. Trainees must select at least one elective for the successful completion of a QP with Electives.
Options	Options are NOS/set of NOS that are identified by the sector as additional skills. There may be multiple options within a QP. It is not mandatory to select any of the options to complete a QP with Options.
Sector	Sector is a conglomeration of different business operations having similar businesses and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Sub-Sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
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