



Spice Processing Technician

QP Code: FIC/Q8502

Version: 3.0

NSQF Level: 3

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Qualification Pack

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Qualification Pack

FIC/Q8502: Spice Processing Technician

Brief Job Description

A Spice Processing Technician is responsible for processing various types of whole and powdered spices and seasonings by operating different equipment in synchronization with other tools and machineries as per the Standard Operating Procedures of the organisation and achieving consistent quality and output.

Personal Attributes

Spice Processing Technician must have the ability to plan, organize and prioritize tasks in the workplace. The individual must possess reading, writing and communication skills. Besides, the individual must be able to handle work pressures and have the physical stamina for long hours of work.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. [FIC/N9026: Prepare for production](#)
2. [FIC/N8515: Produce Spice and Seasoning](#)
3. [FIC/N9901: Implement health and safety practices at the workplace](#)
4. [FIC/N9902: Work effectively in an organisation](#)
5. [SGJ/N1702: Optimize resource utilization at workplace](#)

Qualification Pack (QP) Parameters

Sector	Food Processing
Sub-Sector	Packaged Foods
Occupation	Processing-Packaged Foods
Country	India
NSQF Level	3
Aligned to NCO/ISCO/ISIC Code	NCO-2015/8160.0700

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Minimum Educational Qualification & Experience	8th Class with 2 Years of experience relevant experience OR 10th Class OR Ability to read and write with 5 Years of experience relevant experience
Minimum Level of Education for Training in School	10th Class
Pre-Requisite License or Training	NA
Minimum Job Entry Age	16 Years
Last Reviewed On	24/02/2022
Next Review Date	24/02/2024
Deactivation Date	24/02/2024
NSQC Approval Date	24/02/2022
Version	3.0
Reference code on NQR	2022/FI/FICSI/05405
NQR Version	1

Remarks:

Nil

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FIC/N9026: Prepare for production

Description

This NOS unit is about performing various tasks prior to production in the food processing industry.

Scope

The scope covers the following :

- Plan for production
- Clean and maintain work area, machineries, and tools for production
- Organize for production

Elements and Performance Criteria

Plan for production

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

- PC1.** identify work requirements by obtaining instructions from the supervisor. Instructions: process chart, product flow chart, formulation, chart, etc.
- PC2.** plan and prioritize tasks as per work schedule. Tasks: inspect, clean, maintain, verify, etc.
- PC3.** estimate manpower and material requirements as per work requirement. Material: raw materials and packaging materials
- PC4.** ensure required quantity of raw materials, packaging materials, equipment, and manpower for production
- PC5.** plan capacity utilization of machinery with respect to the processing time, production order, and batch size for each product

Clean and maintain work area, machineries, and tools for production

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

- PC6.** clean and maintain the work area as per organizational procedures
- PC7.** clean and maintain the machines and tools and sanitize them as per the organization's specifications and standards
- PC8.** dispose of the waste material at designated place safely. Waste material: hazardous waste, food waste, packaging waste, etc.
- PC9.** inspect the tools, equipment, and machinery to ascertain suitability for use
- PC10.** report information such as faulty tools and equipment to the concerned authority

Organize for production

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

- PC11.** organize tools and equipment
- PC12.** receive and organize production materials appropriately. Production materials: raw materials, packaging materials, etc.
- PC13.** allot responsibilities/work to the assistants and helpers

Knowledge and Understanding (KU)

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The individual on the job needs to know and understand:

- KU1.** production planning process
- KU2.** analysis and interpretation of various process charts, product flow charts, etc.
- KU3.** resource management process
- KU4.** procedure to estimate manpower and raw material
- KU5.** capacity utilization calculation
- KU6.** organizational policies and SOP on cleanliness
- KU7.** operating procedure and general maintenance of food production machineries
- KU8.** waste management procedures
- KU9.** methods to inspect tools, equipment and machinery
- KU10.** procedure to allot work or responsibility to the team

Generic Skills (GS)

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

- GS1.** read and interpret organizational policies, SOP, production charts, etc.
- GS2.** communicate effectively with subordinates as well as supervisors
- GS3.** plan and prioritize various tasks
- GS4.** be always punctual and courteous
- GS5.** organize all process/equipment manuals to access information easily
- GS6.** discuss task lists, schedules, and activities with the senior/supervisor

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Plan for production</i>	11	25	-	-
PC1. identify work requirements by obtaining instructions from the supervisor. Instructions: process chart, product flow chart, formulation, chart, etc.	3	6	-	-
PC2. plan and prioritize tasks as per work schedule. Tasks: inspect, clean, maintain, verify, etc.	2	5	-	-
PC3. estimate manpower and material requirements as per work requirement. Material: raw materials and packaging materials	2	4	-	-
PC4. ensure required quantity of raw materials, packaging materials, equipment, and manpower for production	2	5	-	-
PC5. plan capacity utilization of machinery with respect to the processing time, production order, and batch size for each product	2	5	-	-
<i>Clean and maintain work area, machineries, and tools for production</i>	14	32	-	-
PC6. clean and maintain the work area as per organizational procedures	3	7	-	-
PC7. clean and maintain the machines and tools and sanitize them as per the organization's specifications and standards	3	7	-	-
PC8. dispose of the waste material at designated place safely. Waste material: hazardous waste, food waste, packaging waste, etc.	3	7	-	-
PC9. inspect the tools, equipment, and machinery to ascertain suitability for use	3	6	-	-
PC10. report information such as faulty tools and equipment to the concerned authority	2	5	-	-
<i>Organize for production</i>	5	13	-	-
PC11. organize tools and equipment	2	7	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. receive and organize production materials appropriately. Production materials: raw materials, packaging materials, etc.	2	4	-	-
PC13. allot responsibilities/work to the assistants and helpers	1	2	-	-
NOS Total	30	70	-	-

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National Occupational Standards (NOS) Parameters

NOS Code	FIC/N9026
NOS Name	Prepare for production
Sector	Food Processing
Sub-Sector	Generic
Occupation	Production
NSQF Level	3
Credits	TBD
Version	1.0
Last Reviewed Date	24/02/2022
Next Review Date	24/02/2025
NSQC Clearance Date	24/02/2022

Qualification Pack

FIC/N8515: Produce Spice and Seasoning

Description

This NOS unit describes the skills and knowledge required to produce and pack different varieties of whole spices, spice powders, curry powders and seasonings using various tools and equipment as per organisational production requirements.

Scope

The scope covers the following :

- Produce whole spices
- Produce Spice and Curry Powder
- Produce Seasonings
- Wrap and Label the Products
- Post product cleaning and regular maintenance of equipment

Elements and Performance Criteria

Produce whole spices

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

- PC1.** clean unprocessed whole spices thoroughly to ensure complete removal of dirt and foreign particles
- PC2.**
 - set controls of the dryer for drying the whole spices adequately and spread it out in the sun as required
 - Controls of the dryer: conveyor speed, drying temperature, relative humidity, time, etc.
- PC3.** transfer the dried whole spices to the cutting machine safely ensuring zero spillage
- PC4.** set controls of the cutting machine to obtain the powdered whole spices for further processing
- PC5.** sterilize the whole spices by operating controls of the sterilizer (temperature, time, pressure, water level, etc.) as per standard procedure
- PC6.** monitor the process and set desired limits for critical control points (CCP) to ensure food safety and prevent contamination
- PC7.** inspect the produced samples for desired parameters such as colour, size, etc. thoroughly
- PC8.**
 - handover the produced samples to the quality lab for testing as per organisational practice
 - Parameters: moisture content, colour retention, size, etc.

Produce Spice and Curry Powder

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

- PC9.** sort and grade the whole spices on the basis of colour, size, appearance, etc. as per production requirements
- PC10.** set control of the roasting machine (such as temperature and time) and monitor the process to ensure adequate roasting of the whole spice
- PC11.** carry out grinding by placing the spices safely and adjusting the grinder screens as per standard practice

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- PC12.** collect the ground spices in container, bags, etc. and allow it to cool adequately
- PC13.** adjust screens in the sifting/sieving machine as per processing needs
- PC14.** sieve the spices to ensure removal of physical contaminants and required fineness for the spice powder
- PC15.** • operate blending machine to produce various types of curry powder as per work requirements
• Curry powder: chilli powder, turmeric powder, cumin seeds, dried mango powder, coriander powder, mustard seeds, etc.
- PC16.** operate the sterilization equipment (pressure, temperature, sterilization time, etc.) for the removal of microbial contaminants using industry recommended chemicals
- PC17.** set controls of the vacuum drying chamber (temperature, pressure, time, etc.) and transfer the sterilized spices for drying adequately
- PC18.** collect curry powder as per standard practice and let it cool adequately before packaging
- PC19.** handover the sample of spice and curry powder to the quality lab for testing as per standard practice

Produce Seasonings

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

- PC20.** • add ingredients to prepare a mixture for blending as per type of seasoning to be produced
• Ingredients: whole spices, salt, oleoresins, spice, liquid flavors, curry, ground spices etc.
- PC21.** sieve the mixture to obtain required fineness for the seasoning to be produced
- PC22.** monitor the process and set desired limits for critical control points (CCP) to ensure food safety and prevent contamination
- PC23.** collect the seasoning as per standard practice and let it cool adequately
- PC24.** handover a sample of the seasoning produced to the quality lab for testing
- PC25.** document significant findings such as process parameters, product details, defects observed, etc. as per organisational practices

Wrap and Label the Products

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

- PC26.** • load the desired packaging material on the machine appropriately to prepare for packaging
• Packaging material: jute bags, airtight glass bottles, polyester laminates, biaxially oriented polypropylene laminates, duplex boxes, aluminium pouches, etc.
- PC27.** load the type of spices on the machine for packaging such as whole and powdered spices, curry powders, seasonings, etc.
- PC28.** set controls of the packaging machine and control the in feed
- PC29.** monitor the packaging process to ensure compliance with the industry standards
- PC30.** • record information (manual, ERP, etc.) of finished products details as per FSSAI regulations of packaging and labelling, 2011
• Details: name of the product, net weight, name and address (manufacturer, packer, distributor, importer, exporter or vendor), batch number, date manufacturing /packing, best before or use date, veg /non-veg logo, FSSAI registration number, ingredient declaration, nutritional value, etc.
- PC31.** check for presence of metallic substances in the packaged spices and curry powders using organisational practices
- PC32.** report information such as variances in product characteristics to the supervisor accurately
- PC33.** document and maintain production records as per organisational work practices

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PC34. verify documents and track from finished product to ingredients, in case of quality concerns and for quality management system audits

PC35. transfer the products to quality lab for analysis and shelf life study

Post product cleaning and regular maintenance of equipment

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

PC36. clean work area, machinery, equipment and tools using recommended cleaning agents and sanitizers after completion of production tasks

PC37. inspect the tools, equipment and machinery to identify defects and ensure their upkeep and maintenance

PC38. report equipment faults to the concerned department/supervisor as per organisational practice

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. organisational policies and procedures pertaining to spice production, quality analysis, hazard handling, reporting, documentation, etc.

KU2. various types of spices that are produced in the industry

KU3. ingredients used in spice production and their favorable characteristics

KU4. sequence of operations to be followed for producing various types of spices

KU5. how to clean the spices thoroughly

KU6. tools and equipment used in spice production, their operation and safe handling

KU7. how to operate the production machinery such as dryer, blender, cutting machine, sterilizer, roasting machine, sifter, etc. safely

KU8. importance of sterilizing the spices

KU9. importance of critical control points, its implementation and monitoring for the production process

KU10. desired product parameters to be achieved the spices to be produced

KU11. different grades of raw materials used in spice production and their usage

KU12. usage of different mesh size as per the product requirement

KU13. impact of microbial contamination in spice production and ways to prevent it

KU14. sensory evaluation of different spices

KU15. how to identify the variances in the characteristics of spices produced

KU16. information to be recorded and type of records to be maintained for spice manufacturing

KU17. how to package the spices and materials used in the process

KU18. basic troubleshooting of production machinery utilised in the process

KU19. applicable FSSAI regulations and importance of following them for spice production

KU20. cleaning procedures such as CIP and COP followed in the food processing industry

KU21. how to store the tools, equipment and related materials safely, their upkeep and maintenance

KU22. information to be mentioned on the packaging labels, printing and labelling as per industry norms

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KU23. types of packaging defects and techniques used for their rectification

KU24. impact of hazards at the workplace and safe practices for disposing them

Generic Skills (GS)

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

GS1. read and interpret information effectively

GS2. communicate with others effectively

GS3. plan and prioritise tasks as per work requirements

GS4. be courteous at all times

GS5. be punctual

GS6. establish workable solutions for problems in hand in consultation with others

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Produce whole spices</i>	8	8	-	4
PC1. clean unprocessed whole spices thoroughly to ensure complete removal of dirt and foreign particles	-	-	-	-
PC2. • set controls of the dryer for drying the whole spices adequately and spread it out in the sun as required • Controls of the dryer: conveyor speed, drying temperature, relative humidity, time, etc.	-	-	-	-
PC3. transfer the dried whole spices to the cutting machine safely ensuring zero spillage	-	-	-	-
PC4. set controls of the cutting machine to obtain the powdered whole spices for further processing	-	-	-	-
PC5. sterilize the whole spices by operating controls of the sterilizer (temperature, time, pressure, water level, etc.) as per standard procedure	-	-	-	-
PC6. monitor the process and set desired limits for critical control points (CCP) to ensure food safety and prevent contamination	-	-	-	-
PC7. inspect the produced samples for desired parameters such as colour, size, etc. thoroughly	-	-	-	-
PC8. • handover the produced samples to the quality lab for testing as per organisational practice • Parameters: moisture content, colour retention, size, etc.	-	-	-	-
<i>Produce Spice and Curry Powder</i>	13	16	-	5
PC9. sort and grade the whole spices on the basis of colour, size, appearance, etc. as per production requirements	-	-	-	-
PC10. set control of the roasting machine (such as temperature and time) and monitor the process to ensure adequate roasting of the whole spice	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. carry out grinding by placing the spices safely and adjusting the grinder screens as per standard practice	-	-	-	-
PC12. collect the ground spices in container, bags, etc. and allow it to cool adequately	-	-	-	-
PC13. adjust screens in the sifting/sieving machine as per processing needs	-	-	-	-
PC14. sieve the spices to ensure removal of physical contaminants and required fineness for the spice powder	-	-	-	-
PC15. <ul style="list-style-type: none"> operate blending machine to produce various types of curry powder as per work requirements Curry powder: chilli powder, turmeric powder, cumin seeds, dried mango powder, coriander powder, mustard seeds, etc. 	-	-	-	-
PC16. operate the sterilization equipment (pressure, temperature, sterilization time, etc.) for the removal of microbial contaminants using industry recommended chemicals	-	-	-	-
PC17. set controls of the vacuum drying chamber (temperature, pressure, time, etc.) and transfer the sterilized spices for drying adequately	-	-	-	-
PC18. collect curry powder as per standard practice and let it cool adequately before packaging	-	-	-	-
PC19. handover the sample of spice and curry powder to the quality lab for testing as per standard practice	-	-	-	-
<i>Produce Seasonings</i>	6	8	-	2
PC20. <ul style="list-style-type: none"> add ingredients to prepare a mixture for blending as per type of seasoning to be produced Ingredients: whole spices, salt, oleoresins, spice, liquid flavors, curry, ground spices etc. 	-	-	-	-
PC21. sieve the mixture to obtain required fineness for the seasoning to be produced	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC22. monitor the process and set desired limits for critical control points (CCP) to ensure food safety and prevent contamination	-	-	-	-
PC23. collect the seasoning as per standard practice and let it cool adequately	-	-	-	-
PC24. handover a sample of the seasoning produced to the quality lab for testing	-	-	-	-
PC25. document significant findings such as process parameters, product details, defects observed, etc. as per organisational practices	-	-	-	-
<i>Wrap and Label the Products</i>	13	20	-	3
PC26. <ul style="list-style-type: none"> load the desired packaging material on the machine appropriately to prepare for packaging Packaging material: jute bags, airtight glass bottles, polyester laminates, biaxially oriented polypropylene laminates, duplex boxes, aluminium pouches, etc. 	-	-	-	-
PC27. load the type of spices on the machine for packaging such as whole and powdered spices, curry powders, seasonings, etc.	-	-	-	-
PC28. set controls of the packaging machine and control the in feed	-	-	-	-
PC29. monitor the packaging process to ensure compliance with the industry standards	-	-	-	-
PC30. <ul style="list-style-type: none"> record information (manual, ERP, etc.) of finished products details as per FSSAI regulations of packaging and labelling, 2011 Details: name of the product, net weight, name and address (manufacturer, packer, distributor, importer, exporter or vendor), batch number, date manufacturing /packing, best before or use date, veg /non-veg logo, FSSAI registration number, ingredient declaration, nutritional value, etc. 	-	-	-	-
PC31. check for presence of metallic substances in the packaged spices and curry powders using organisational practices	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC32. report information such as variances in product characteristics to the supervisor accurately	-	-	-	-
PC33. document and maintain production records as per organisational work practices	-	-	-	-
PC34. verify documents and track from finished product to ingredients, in case of quality concerns and for quality management system audits	-	-	-	-
PC35. transfer the products to quality lab for analysis and shelf life study	-	-	-	-
<i>Post product cleaning and regular maintenance of equipment</i>	3	5	-	1
PC36. clean work area, machinery, equipment and tools using recommended cleaning agents and sanitizers after completion of production tasks	-	-	-	-
PC37. inspect the tools, equipment and machinery to identify defects and ensure their upkeep and maintenance	-	-	-	-
PC38. report equipment faults to the concerned department/supervisor as per organisational practice	-	-	-	-
NOS Total	43	57	-	15

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National Occupational Standards (NOS) Parameters

NOS Code	FIC/N8515
NOS Name	Produce Spice and Seasoning
Sector	Food Processing
Sub-Sector	Packaged Foods
Occupation	Processing-Packaged Foods
NSQF Level	3
Credits	TBD
Version	1.0
Last Reviewed Date	24/02/2022
Next Review Date	24/02/2024
NSQC Clearance Date	24/02/2022

Qualification Pack

FIC/N9901: Implement health and safety practices at the workplace

Description

This unit is about following health and safety procedures at the workplace.

Scope

The scope covers the following :

- Ensure food safety and personal hygiene
- Follow safety measures to avoid accidents
- Follow emergency procedures
- Manage infection control

Elements and Performance Criteria

Ensure food safety and personal hygiene

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

- PC1.** follow relevant practices to avoid cross contamination at all stages of food processing operations
- PC2.** follow organisational procedures for handling items that may cause allergic reactions
- PC3.** follow Good Manufacturing Practices (GMP) at the workplace. Good Manufacturing Practices: location and layout (ergonomics), cleaning and sanitation, equipment and containers, pest control, facilities (lighting, water supply, drainage and waste disposal, air quality and ventilation), food storage, transportation, and distribution (Source: Schedule IV, FSSAI Licensing and Registration, 2011)
- PC4.** follow Good Hygiene Practices (GHP) at the workplace appropriately. Good Hygiene Practices: use of gloves, hairnets, masks, ear plugs, goggles, shoes etc; washing hands regularly; treating injuries such as cuts, boils, skin infections and grazes; preventive health check-ups ; getting vaccinated whenever required. (Source: Schedule IV, FSSAI Licensing and Registration, 2011)

Follow safety measures to avoid accidents

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

- PC5.** use protective clothing/equipment for specific tasks and work conditions
- PC6.** identify job-site hazardous work and possible causes of risk or accident at the workplace
- PC7.** deal with hazards safely and appropriately to ensure safety of self and others as per organisational protocol
- PC8.** use various types of fire extinguishers effectively
- PC9.** respond promptly and appropriately to an accident situation or medical emergency
- PC10.** provide cardio-pulmonary resuscitation (CPR) as per the requirement (e.g. cardiac arrest)

Follow emergency procedures

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

- PC11.** follow workplace emergency and evacuation procedures
- PC12.** use safe methods to free a person from electrocution

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PC13. administer appropriate first aid to victims in case of cuts, bleeding, burns, choking, electric shock, poisoning etc.

Manage infection control

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

PC14. use appropriate disinfectants to disinfect the work area and equipment as per organisational protocol

PC15. ensure personal hygiene by washing hands regularly using alcohol based sanitisers and wearing personal protective equipment (PPE)

PC16. report illness of self and others to the supervisor or concerned authority

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. meaning of hazards and risks

KU2. possible causes of risk, hazard or accident in the workplace

KU3. where to find all the general health and safety equipment in the workplace

KU4. health and safety policy and procedures of the organization

KU5. health and safety hazards commonly present in the work environment

KU6. work practices and precautions used to control and prevent risks, hazards and accidents

KU7. applicable standards and regulations as listed in The Food Safety and Standards Act, 2006

KU8. importance of each personal protective equipment used such as eye protection, hard hats, gloves apron, rubber boots, etc.

KU9. importance of ensuring personal hygiene at the workplace

KU10. ways to prevent cross contamination at the workplace

KU11. importance of storing food at specified temperatures

KU12. various dangers associated with the use of electrical and other equipment

KU13. preventive and remedial actions to be taken in the case of exposure to toxic materials

KU14. various causes of fire and the ways to prevent them

KU15. techniques of using the different fire extinguishers

KU16. procedure followed for providing cardio-pulmonary resuscitation (CPR) to the affected

KU17. rescue techniques applied during a fire hazard

KU18. various types of safety signs and what they mean

KU19. workplace emergency and evacuation procedures

KU20. appropriate basic first aid treatment relevant to the condition e.g. shock, electrical shock, bleeding, breaks to bones, minor burns, resuscitation, poisoning, eye injuries

KU21. potential injuries and ill health conditions associated with incorrect manual handling

KU22. safe lifting and carrying practices

KU23. safe practices to be followed for ensuring sanitisation of self and work area

KU24. procedure for storing the sanitising materials appropriately

Generic Skills (GS)

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

- GS1.** write an accident/incident report in local language or English
- GS2.** read and comprehend basic content to read labels, charts, signages, symbols and product manuals
- GS3.** communicate with coworkers appropriately in order to clarify instructions and other issues
- GS4.** make appropriate decisions pertaining to the concerned area of work regarding the work objective, span of authority, responsibility, laid down procedure and guidelines
- GS5.** plan and organize the work schedule, work area, tools, equipment and materials for improved productivity
- GS6.** identify probable solutions to the problems in hand and evaluate them
- GS7.** seek official and authorised sources of help and guidance to resolve problems that cannot be solved at one's level of authority

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Ensure food safety and personal hygiene</i>	7	19	-	-
PC1. follow relevant practices to avoid cross contamination at all stages of food processing operations	1	4	-	-
PC2. follow organisational procedures for handling items that may cause allergic reactions	1	4	-	-
PC3. follow Good Manufacturing Practices (GMP) at the workplace. Good Manufacturing Practices: location and layout (ergonomics), cleaning and sanitation, equipment and containers, pest control, facilities (lighting, water supply, drainage and waste disposal, air quality and ventilation), food storage, transportation, and distribution (Source: Schedule IV, FSSAI Licensing and Registration, 2011)	3	7	-	-
PC4. follow Good Hygiene Practices (GHP) at the workplace appropriately. Good Hygiene Practices: use of gloves, hairnets, masks, ear plugs, goggles, shoes etc; washing hands regularly; treating injuries such as cuts, boils, skin infections and grazes; preventive health check-ups ; getting vaccinated whenever required. (Source: Schedule IV, FSSAI Licensing and Registration, 2011)	2	4	-	-
<i>Follow safety measures to avoid accidents</i>	11	24	-	-
PC5. use protective clothing/equipment for specific tasks and work conditions	2	4	-	-
PC6. identify job-site hazardous work and possible causes of risk or accident at the workplace	2	4	-	-
PC7. deal with hazards safely and appropriately to ensure safety of self and others as per organisational protocol	2	4	-	-
PC8. use various types of fire extinguishers effectively	2	4	-	-
PC9. respond promptly and appropriately to an accident situation or medical emergency	1	4	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC10. provide cardio-pulmonary resuscitation (CPR) as per the requirement (e.g. cardiac arrest)	2	4	-	-
<i>Follow emergency procedures</i>	6	12	-	-
PC11. follow workplace emergency and evacuation procedures	2	4	-	-
PC12. use safe methods to free a person from electrocution	2	4	-	-
PC13. administer appropriate first aid to victims in case of cuts, bleeding, burns, choking, electric shock, poisoning etc.	2	4	-	-
<i>Manage infection control</i>	6	15	-	-
PC14. use appropriate disinfectants to disinfect the work area and equipment as per organisational protocol	3	7	-	-
PC15. ensure personal hygiene by washing hands regularly using alcohol based sanitisers and wearing personal protective equipment (PPE)	1	4	-	-
PC16. report illness of self and others to the supervisor or concerned authority	2	4	-	-
NOS Total	30	70	-	-

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	FIC/N9901
NOS Name	Implement health and safety practices at the workplace
Sector	Food Processing
Sub-Sector	Generic
Occupation	Generic
NSQF Level	3
Credits	TBD
Version	1.0
Last Reviewed Date	24/02/2022
Next Review Date	24/02/2025
NSQC Clearance Date	24/02/2022

Qualification Pack

FIC/N9902: Work effectively in an organisation

Description

This unit is about working effectively with others.

Scope

The scope covers the following :

- Communicate effectively
- Work in a team effectively
- Respect diversity

Elements and Performance Criteria

Communicate effectively

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

- PC1.** obtain complete information and instructions from designated personnel
- PC2.** reciprocate understanding and seek clarifications whenever required
- PC3.** provide information accurately and clearly
- PC4.** use inclusive language (verbal, non-verbal and written) that is gender, disability and culturally sensitive

Work in a team effectively

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

- PC5.** plan tasks to be performed as per priority and need
- PC6.** consult with and assist others to maximize effectiveness and efficiency at work
- PC7.** escalate problems and grievances beyond own scope to the concerned authority
- PC8.** take appropriate action to resolve conflicts at the workplace

Respect diversity

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

- PC9.** maintain a gender-neutral behaviour with everyone at the workplace
- PC10.** empathise with People with Disabilities (PwD) and offer help, if required
- PC11.** recognise and report incidents of harassment and discrimination to appropriate authority

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** organizational quality procedures and processes associated with work
- KU2.** standards, policies, and procedures followed in the organization relevant to employment, harassment, discrimination and performance conditions
- KU3.** reporting structure, inter-dependent functions, lines, and procedures applicable at the workplace

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- KU4.** different types of harassment and discrimination based on gender, disability, caste, religion, and culture
- KU5.** components of effective communication and its importance
- KU6.** importance of teamwork in organizational and individual success
- KU7.** importance of ethics and discipline for professional success
- KU8.** how to express and address grievances appropriately and effectively
- KU9.** importance and ways of managing interpersonal conflict effectively
- KU10.** different types of disabilities and the challenges faced by persons with disability (PwD)
- KU11.** laws, acts and provisions defined for PwD
- KU12.** importance of gender sensitivity and equality
- KU13.** legislations, grievance redressal mechanisms, and penalties against harassment in the workplace

Generic Skills (GS)

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

- GS1.** communicate information, doubts and concerns about work related matters in local language or Hindi/English
- GS2.** read and interpret information given in local language or Hindi/English
- GS3.** establish priorities and deadlines in consultation with other and record them
- GS4.** be punctual
- GS5.** listen to others concerns and doubts carefully and address them
- GS6.** be courteous

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Communicate effectively</i>	8	13	-	-
PC1. obtain complete information and instructions from designated personnel	2	3	-	-
PC2. reciprocate understanding and seek clarifications whenever required	2	3	-	-
PC3. provide information accurately and clearly	2	3	-	-
PC4. use inclusive language (verbal, non-verbal and written) that is gender, disability and culturally sensitive	2	4	-	-
<i>Work in a team effectively</i>	8	14	-	-
PC5. plan tasks to be performed as per priority and need	2	4	-	-
PC6. consult with and assist others to maximize effectiveness and efficiency at work	2	3	-	-
PC7. escalate problems and grievances beyond own scope to the concerned authority	2	3	-	-
PC8. take appropriate action to resolve conflicts at the workplace	2	4	-	-
<i>Respect diversity</i>	6	12	-	-
PC9. maintain a gender-neutral behaviour with everyone at the workplace	2	4	-	-
PC10. empathise with People with Disabilities (PwD) and offer help, if required	2	4	-	-
PC11. recognise and report incidents of harassment and discrimination to appropriate authority	2	4	-	-
NOS Total	22	39	-	-

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National Occupational Standards (NOS) Parameters

NOS Code	FIC/N9902
NOS Name	Work effectively in an organisation
Sector	Food Processing
Sub-Sector	Generic
Occupation	Generic
NSQF Level	3
Credits	TBD
Version	1.0
Last Reviewed Date	24/02/2022
Next Review Date	24/02/2025
NSQC Clearance Date	24/02/2022

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SGJ/N1702: Optimize resource utilization at workplace

Description

This unit is about adopting sustainable practices and optimizing use of resources, especially material, energy and waste, in day-to-day operations at work

Scope

The scope covers the following :

- Material conservation practices
- Energy/electricity conservation practices
- Effective waste management/recycling practices

Elements and Performance Criteria

Material conservation practices

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

- PC1.** identify ways to optimize usage of material including water in various tasks/activities/processes
- PC2.** check for spills/leakages in various tasks/activities/processes
- PC3.** plug spills/leakages and escalate to appropriate authority if unable to rectify
- PC4.** carry out routine cleaning of tools, machines and equipment

Energy/electricity conservation practices

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

- PC5.** identify ways to optimize usage of electricity/energy in various tasks/activities/processes
- PC6.** check if the equipment/machine is functioning normally before commencing work and rectify wherever required
- PC7.** report malfunctioning (fumes/sparks/emission/vibration/noise) and lapse in maintenance of equipment
- PC8.** ensure electrical equipment and appliances are properly connected and turned off when not in use

Effective waste management/recycling practices

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

- PC9.** identify recyclable and non-recyclable, and hazardous waste generated
- PC10.** segregate waste into different categories
- PC11.** dispose non-recyclable waste appropriately
- PC12.** deposit recyclable and reusable material at identified location
- PC13.** follow processes specified for disposal of hazardous waste

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

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- KU1.** potential hazards, risks and threats based on the nature of work
- KU2.** layout of the workstation and electrical and thermal equipment used
- KU3.** organizations procedures for minimizing waste
- KU4.** efficient and inefficient utilization of material and water
- KU5.** ways of efficiently managing material and water in the process
- KU6.** basics of electricity and prevalent energy efficient devices
- KU7.** ways to recognize common electrical problems
- KU8.** common practices of conserving electricity
- KU9.** usage of different colours of dustbins
- KU10.** categorization of waste into dry, wet, recyclable, non-recyclable and items of single-use plastics
- KU11.** waste management and methods of waste disposal
- KU12.** common sources of pollution and ways to minimize it

Generic Skills (GS)

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

- GS1.** record data on waste disposal at workplace
- GS2.** complete statutory documents relevant to safety and hygiene
- GS3.** read Standard Operating Practices (SOP) documents
- GS4.** communicate with colleagues on the significance of greening of jobs
- GS5.** make timely decisions for efficient utilization of resources
- GS6.** complete tasks efficiently and accurately within stipulated time
- GS7.** work with supervisors/team members to carry out work related tasks
- GS8.** identify cause and effect of greening of jobs

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Material conservation practices</i>	4	8	-	-
PC1. identify ways to optimize usage of material including water in various tasks/activities/processes	1	2	-	-
PC2. check for spills/leakages in various tasks/activities/processes	1	2	-	-
PC3. plug spills/leakages and escalate to appropriate authority if unable to rectify	1	2	-	-
PC4. carry out routine cleaning of tools, machines and equipment	1	2	-	-
<i>Energy/electricity conservation practices</i>	4	8	-	-
PC5. identify ways to optimize usage of electricity/energy in various tasks/activities/processes	1	2	-	-
PC6. check if the equipment/machine is functioning normally before commencing work and rectify wherever required	1	2	-	-
PC7. report malfunctioning (fumes/sparks/emission/vibration/noise) and lapse in maintenance of equipment	1	2	-	-
PC8. ensure electrical equipment and appliances are properly connected and turned off when not in use	1	2	-	-
<i>Effective waste management/recycling practices</i>	5	10	-	-
PC9. identify recyclable and non-recyclable, and hazardous waste generated	1	2	-	-
PC10. segregate waste into different categories	1	2	-	-
PC11. dispose non-recyclable waste appropriately	1	2	-	-
PC12. deposit recyclable and reusable material at identified location	1	2	-	-
PC13. follow processes specified for disposal of hazardous waste	1	2	-	-



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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
NOS Total	13	26	-	-

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National Occupational Standards (NOS) Parameters

NOS Code	SGJ/N1702
NOS Name	Optimize resource utilization at workplace
Sector	Green Jobs
Sub-Sector	Other Green Jobs
Occupation	Resource Optimization
NSQF Level	3
Credits	TBD
Version	1.0
Last Reviewed Date	10/08/2022
Next Review Date	27/01/2026
NSQC Clearance Date	27/01/2022

Assessment Guidelines and Assessment Weightage

Assessment Guidelines

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

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Minimum Aggregate Passing % at QP Level : 70

(**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/N9026.Prepare for production	30	70	-	-	100	30
FIC/N8515.Produce Spice and Seasoning	43	57	-	15	115	45
FIC/N9901.Implement health and safety practices at the workplace	30	70	-	-	100	10
FIC/N9902.Work effectively in an organisation	22	39	-	-	61	10
SGJ/N1702.Optimize resource utilization at workplace	13	26	-	-	39	5
Total	138	262	-	15	415	100

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Acronyms

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training

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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.

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Knowledge and Understanding (KU)	<p>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.</p>
Organisational Context	<p>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.</p>
Technical Knowledge	<p>Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.</p>
Core Skills/ Generic Skills (GS)	<p>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.</p>
Electives	<p>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.</p>
Options	<p>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.</p>