

Qualification Pack



Craft Baker

QP Code: FIC/Q5002

Version: 3.0

NSQF Level: 4

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FIC/Q5002: Craft Baker

Brief Job Description

A Craft Baker produces a variety of artisanal bakery products on a small scale for the retail market. The incumbent is also responsible for procuring good quality raw materials, producing desired quality of products and coordinating with vendors for the delivery of the product. During the entire work process, the individual adheres to good working practices and employs appropriate measures to ensure food safety at the workplace.

Personal Attributes

A Craft Baker must be a quick learner, critical decision maker, creative and able to lead a team. The individual must be able to communicate effectively, plan, organize and prioritize tasks as per work requirements. The individual must be able to address customer needs effectively.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. [FIC/N5002: Prepare for production of baked products in artisan bakeries and patisseries](#)
2. [FIC/N5007: Produce baked products in artisan bakeries and patisseries](#)
3. [FIC/N9905: Establish facilities for artisanal food production](#)
4. [FIC/N9904: Ensure food safety at the workplace](#)
5. [FIC/N9903: Ensure workplace health and safety](#)
6. [FIC/N9902: Work effectively in an organisation](#)
7. [SGJ/N1702: Optimize resource utilization at workplace](#)

Qualification Pack (QP) Parameters

Sector	Food Processing
Sub-Sector	Bread and Bakery
Occupation	Processing-Bread and Bakery
Country	India

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NSQF Level	4
Aligned to NCO/ISCO/ISIC Code	NCO-2015/7512.9900
Minimum Educational Qualification & Experience	Graduate (any stream) OR 10th Class with 2 Years of experience relevant experience OR 12th Class OR 10th Class (and 2 years of ITI or 3 years of diploma) OR Certificate-NSQF (Level 3 qualification in food processing sector) with 2 Years of experience
Minimum Level of Education for Training in School	Not Applicable
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years
Last Reviewed On	24/02/2022
Next Review Date	24/02/2025
NSQC Approval Date	24/02/2022
Version	3.0
Reference code on NQR	2022/FI/FICSI/05510
NQR Version	1.0

Remarks:

NA

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FIC/N5002: Prepare for production of baked products in artisan bakeries and patisseries

Description

This NOS unit is about planning to produce artisanal baked products while ensuring the availability of required materials (raw and packaging), tools, equipment and manpower in compliance with standard work practices.

Scope

The scope covers the following :

- Plan to produce artisanal baked products
- Maintain work area for production
- Maintain process machinery and tools
- Select and test materials for production

Elements and Performance Criteria

Plan to produce artisanal baked products

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

- PC1.** obtain work requirements from various sources such as individuals, organisations, etc.
- PC2.** identify the type of bakery products to be manufactured, processes to be used, tools and equipment required
- PC3.**
 - document a standardized production plan for producing the desired bakery products
 - Production plan: quality and quantity of materials to be used, production estimation, timelines and schedule, budgetary requirements, other materials required; tools, equipment and machinery utilised, etc.
 - bakery products: bread and buns, cake and sweet doughs, etc.
- PC4.** plan the production process by referring to process flow chart, formulation charts, etc.
- PC5.**
 - check the availability of raw materials, packaging materials, equipment and manpower required for the job Raw material: flour, sugar, fat, oil, water, food additives etc.
 - Packaging material: carton, box, duplex, laminates, decorating items, etc.
 - Equipment: flour sifter, mixer, oven, etc.
- PC6.** plan the batch size based on the production order and machine capacity
- PC7.** calculate material requirements for the baking process and prepare the indent accordingly
- PC8.** submit requirements (including indent) to the concerned personnel and address their queries

Maintain work area for production

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

- PC9.** inspect the work area for the presence of waste and hazardous materials
- PC10.** clean the work area using industry approved sanitizers and chemical agents thoroughly
- PC11.** establish inspection and verification methods to evaluate effectiveness of cleaning and sanitation program

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PC12. dispose waste materials from the work area safely as per standard operating procedure (SOP)

Maintain process machinery and tools

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

PC13. inspect the production tools, equipment and machinery for desired functioning

PC14. clean the production tools, equipment and machinery to be used thoroughly and calibrate them appropriately

PC15. assemble the materials to be used as per standard work practices

Select and test materials for production

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

PC16. receive the desired materials safely
Desired material: raw materials, packaging materials, etc.

PC17. test the samples thoroughly by carrying out organoleptic evaluation, chemical and biological testing, etc.

PC18. report substandard quality ingredients to the relevant personnel promptly

PC19. store the ingredients as per standards set in the plant diagram

PC20. record information such as materials received, quantity and quality of the products to be manufactured, etc.

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. roles and responsibilities in the job

KU2. basics of baking science

KU3. characteristics of various types of baked products that are manufactured such as cakes, pastries, breads, buns, rolls, cookies and other sweet dough products, etc.

KU4. types of basic bakery products that are produced through hands with minimum use of machines and equipment

KU5. customer requirements and materials (raw and packaged) required for producing the desired products

KU6. biological, chemical and physical properties of the samples and the significance of these properties in the proper conduct of sampling of material

KU7. how to calculate material requirements and prepare indents highlighting the production needs

KU8. tools and equipment to be utilised in the job (such as mixer, kneader, cutter, slicer, moulder, oven, packaging and sealing machine, shifter, etc.) their operation and maintenance

KU9. how to plan for craft baking

KU10. sequence of operations for producing baked products

KU11. process such as fermentation, mixing, baking, moulding, cutting, slicing, etc. and techniques for their implementation

KU12. process of premixing which includes handling of ingredients, weighing, and sieving of dry ingredients as required for the final product

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- KU13.** optimal conditions (such as temperature, storage time) to be ensured during the production process
- KU14.** methods of producing shaped dough such as cutting, slicing, moulding, baking, laminating etc.
- KU15.** calibration of the equipment and tools to be used in the job
- KU16.** standards, policies and procedures to be followed pertaining to the quality and delivery standards, food safety, health and safety, hazard handling, waste disposal, documentation, etc.
- KU17.** impact of not following defined work procedures
- KU18.** how to clean and disinfect the work area, tools and equipment, chemicals used and potential allergens associated with manufacturing process
- KU19.** supplier/ manufacturer instructions pertaining to cleaning and upkeep of production machinery
- KU20.** food safety standards and applicable FSSAI regulations to be followed in the job
- KU21.** potential food safety risks and control procedures associated with the job
- KU22.** information to be recorded and methods used for recording it
- KU23.** methods used to test the raw materials received for appropriateness
- KU24.** how to store the raw materials safely
- KU25.** importance of ensuring a tidy workplace

Generic Skills (GS)

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

- GS1.** interpret material requirements from customer interactions, production needs, etc. accurately
- GS2.** read and interpret process flowcharts, manufacturer documents, equipment manuals, etc. effectively etc.
- GS3.** write in local language/Hindi/English effectively
- GS4.** communicate with others (such as vendors and customers) effectively
- GS5.** attentively listen and comprehend the information given by the speaker
- GS6.** analyze critical points in day-to-day tasks and identify control measures to solve the issue
- GS7.** plan and prioritise tasks as per work requirements
- GS8.** address issues promptly and effectively
- GS9.** apply domain information in the job as required
- GS10.** manage a team, segregation of work for efficient and effective outcome

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Plan to produce artisanal baked products</i>	16	24	-	-
PC1. obtain work requirements from various sources such as individuals, organisations, etc.	-	-	-	-
PC2. identify the type of bakery products to be manufactured, processes to be used, tools and equipment required	-	-	-	-
PC3. <ul style="list-style-type: none"> document a standardized production plan for producing the desired bakery products Production plan: quality and quantity of materials to be used, production estimation, timelines and schedule, budgetary requirements, other materials required; tools, equipment and machinery utilised, etc. bakery products: bread and buns, cake and sweet doughs, etc. 	-	-	-	-
PC4. plan the production process by referring to process flow chart, formulation charts, etc.	-	-	-	-
PC5. <ul style="list-style-type: none"> check the availability of raw materials, packaging materials, equipment and manpower required for the job Raw material: flour, sugar, fat, oil, water, food additives etc. Packaging material: carton, box, duplex, laminates, decorating items, etc. Equipment: flour sifter, mixer, oven, etc. 	-	-	-	-
PC6. plan the batch size based on the production order and machine capacity	-	-	-	-
PC7. calculate material requirements for the baking process and prepare the indent accordingly	-	-	-	-
PC8. submit requirements (including indent) to the concerned personnel and address their queries	-	-	-	-
<i>Maintain work area for production</i>	6	14	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC9. inspect the work area for the presence of waste and hazardous materials	-	-	-	-
PC10. clean the work area using industry approved sanitizers and chemical agents thoroughly	-	-	-	-
PC11. establish inspection and verification methods to evaluate effectiveness of cleaning and sanitation program	-	-	-	-
PC12. dispose waste materials from the work area safely as per standard operating procedure (SOP)	-	-	-	-
<i>Maintain process machinery and tools</i>	3	12	-	-
PC13. inspect the production tools, equipment and machinery for desired functioning	-	-	-	-
PC14. clean the production tools, equipment and machinery to be used thoroughly and calibrate them appropriately	-	-	-	-
PC15. assemble the materials to be used as per standard work practices	-	-	-	-
<i>Select and test materials for production</i>	5	20	-	-
PC16. receive the desired materials safely Desired material: raw materials, packaging materials, etc.	-	-	-	-
PC17. test the samples thoroughly by carrying out organoleptic evaluation, chemical and biological testing, etc.	-	-	-	-
PC18. report substandard quality ingredients to the relevant personnel promptly	-	-	-	-
PC19. store the ingredients as per standards set in the plant diagram	-	-	-	-
PC20. record information such as materials received, quantity and quality of the products to be manufactured, etc.	-	-	-	-
NOS Total	30	70	-	-

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National Occupational Standards (NOS) Parameters

NOS Code	FIC/N5002
NOS Name	Prepare for production of baked products in artisan bakeries and patisseries
Sector	Food Processing
Sub-Sector	Bread and Bakery
Occupation	Processing-Bread and Bakery
NSQF Level	4
Credits	TBD
Version	2.0
Last Reviewed Date	24/02/2022
Next Review Date	24/02/2025
NSQC Clearance Date	24/02/2022

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FIC/N5007: Produce baked products in artisan bakeries and patisseries

Description

This NOS talks about performing relevant steps to produce different types of products in an artisanal bakery.

Scope

The scope covers the following :

- Measure and mix the ingredients
- Produce artisanal breads and buns
- Produce artisanal cakes, hard and soft dough products
- Bake the products
- Packaging of baked products
- Display artisanal baked products
- Manage finished goods and post production activities

Elements and Performance Criteria

Measure and mix the ingredients

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

- PC1.** weigh and measure the dry and wet ingredients separately as per the recipe specifications
Dry ingredients: flour, sugar, salt, spices, etc. Wet ingredients: cream, fat, water, etc.
- PC2.** sift the ingredients as per requirement
Ingredients: flour, baking powder, baking soda, cocoa, starch powder etc.
- PC3.** add yeast to the mix depending on the product to be produced
- PC4.** check the quantity of the mixture and transfer it into the mixer appropriately
- PC5.** add dry ingredient to wet ingredient always at some intervals to avoid gluten formation
- PC6.** set the controls of the mixer (speed, time, temperature, etc.) as per production requirements
- PC7.** monitor the parameters of the mixer/blender to achieve uniform mixing
- PC8.** store the premix at designated areas safely

Produce artisanal breads and buns

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

- PC9.** add ingredients such as emulsifiers, preservatives, colours and flavours etc. into the premix as per requirements
- PC10.** set and control time and temperature of fermented dough/batter depending on product requirement
- PC11.** apply appropriate pressure to punch down the risen dough and place it in the loaf pan for the next fermentation cycle and proofing
- PC12.** inspect the quality of the dough thoroughly and check for undesirable characteristics such as cracking, over fermented, under fermented, water absorption capacity, etc.
- PC13.** divide the dough into balls of standard sizes
- PC14.** select the moulds and place the dough balls to ensure it acquires the desired shape

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Produce artisanal cakes, hard and soft dough products

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

- PC15.** select the toppings and add them on the dough/batter Toppings: choco chips, cherries, sprinklers, etc.
- PC16.** transfer the batter/dough into moulds of different shapes
- PC17.** cut the dough into desired shape to achieve design as per the product requirement
- PC18.** prepare cream fat as per the recipe formulation
- PC19.** add desired flavours to the cream for icing
- PC20.** apply center filling and sandwich fillings, wherever required

Bake the products

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

- PC21.** pre heat the oven and set the parameters
- PC22.** transfer the dough/ batter into baking pans safely
- PC23.** load the baking pans in the oven and monitor the baking process of different products
Products: pastry products, soft cookie doughs, filled and two-dough cookies, cakes, biscuits, breads etc.
- PC24.** place the baked products into a cooling station and let it cool for the specified time
- PC25.** unload and de-pan baked products to cool
- PC26.** inspect the quality of the baked product and check for defects
- PC27.** apply cream/icing on cookies, biscuits, cakes, pies, etc. using standard methods as per requirements Standard methods: layering, sandwiching, filling, etc.
- PC28.** inspect the product for overfilling or underfilling of cream
- PC29.** inspect the product parameters to ensure desired quality Parameters: texture, flavor, color, odour, height, crumbliness etc.
- PC30.** use sight, feel and skewers to assess the quality of the baked products such as time, temperature, rotating speed, conveyor speed, etc. Products: cake, pie, tart, etc.
- PC31.** handover the samples to the quality lab for testing and final approval Testing: physical, chemical, microbiological, organoleptic, etc.
- PC32.** dispose waste materials safely as per environmental practices

Packaging of baked products

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

- PC33.** load the packaging material on the machine appropriately or arrange the material for manual packaging
- PC34.** transfer the baked products for packaging safely and ensure it is placed properly
- PC35.** monitor the wrapping and labelling process to ensure it follows the specifications
- PC36.** record information (manual, ERP, etc.) of finished products details such as name of the product, batch number, time of packing, date of manufacture, date of expiry, other label details, primary and secondary packaging materials for all finished products, storage conditions, etc. according to the FSSAI standards of packaging and labelling
- PC37.** store cakes, pastries, pies, tarts and reusable by-products in appropriate environmental conditions

Display artisanal baked products

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

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- PC38.** select the type of display for cakes, pastries, pies and tarts in a way that attracts maximum attention
- PC39.** use suitable service wares to present and store baked products on display
- PC40.** adjust the storage conditions for the baked products on display to maintain utmost freshness and quality

Manage finished goods and post production activities

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

- PC41.** inspect the quality of finished products thoroughly before dispatch
- PC42.** coordinate with vendors for distribution and supply of baked products to individuals and organisations
- PC43.** record information for quality and quantity of goods supplied, vendor details, customer details, material receipts, time of shipment, etc.
- PC44.** monitor stocked material (raw material, processed material and finished goods) for desired quality and quantity as per the purchase order
- PC45.** ensure a clean and tidy workplace and take relevant measures against pest infestations and presence of dust, water, etc.
- PC46.** clean the work area, machineries, equipment and tools using appropriate cleaning agents and sanitizers
- PC47.** repair minor faults in the equipment or machines
- PC48.** dispose the waste as per standard operating procedures

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** different types of formulations that are utilised for baked products
- KU2.** types of bakery products as pan breads buns and rolls, baked snacks, doughnuts, Indian breads - pav and kulcha and their identification
- KU3.** tools, equipment and materials (such as ingredients, preservatives, flavours, etc.) to be used for producing the desired product
- KU4.** storage of raw materials appropriately
- KU5.** sequence of operations for producing various types of baked products
- KU6.** types of sponge/ batter used in production of cream, cakes and other traditional bakery products
- KU7.** quality parameters to be achieved during the entire process
- KU8.** amount of ingredients to be added as per final product
- KU9.** how to operate the mixer and/or blender in the job
- KU10.** principles and processes involved for extended fermentation doughs
- KU11.** difference between soft and hard dough
- KU12.** process of fermentation, its importance and proofing time for breads, buns, etc.
- KU13.** basic aspects of yeast fermentation and preparation of dough
- KU14.** types of premixes required for bakery products
- KU15.** different methods of dough preparation

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- KU16.** temperature requirements for fermented dough and batter
- KU17.** how to inspect the quality of the dough and the batter
- KU18.** process of producing cream for filling and decoration
- KU19.** changes observed during fermentation, flavour development, etc.
- KU20.** scoring and topping of baked products
- KU21.** oven profiling, preheating, oven control points, and how to operate the oven for baking
- KU22.** various risks involved with handling oven, temperature and humidity controls
- KU23.** cooling process of artisanal baked products
- KU24.** how to inspect parameters such as texture, flavour, colour, odour, height, crumbliness of the baked product
- KU25.** importance of testing the samples of baked products, identification of defects and their timely rectification
- KU26.** critical control points in the manufacturing of bakery products
- KU27.** techniques used for the assessment of characteristics of final baked products, and related food safety issues
- KU28.** nutritional value of classical and contemporary cakes, pastries, pies and tarts
- KU29.** historical and cultural derivations of a variety of cakes, pastries, pies and tarts
- KU30.** indicators of freshness and quality of stocked ingredients for cakes, pastries, pies and tarts
- KU31.** ambient storage conditions and shelf-life for ingredients and related sequencing requirements
- KU32.** optimum storage conditions for the finished product prior to sale
- KU33.** ingredient suppliers and pricing information
- KU34.** standard methods of estimating fixed and variable costs, and profit margin to determine sale price range
- KU35.** trade practice issues when pricing products
- KU36.** different quality tests performed on baked items
- KU37.** safe disposal of waste and unwanted materials from the work area
- KU38.** how to inspect the finished product before dispatch
- KU39.** importance of vendor coordination and details to be shared for supply of finished products
- KU40.** packaging and wrapping for different types of baked products
- KU41.** methods for maintaining quality of baked product during the entire work process
- KU42.** various techniques and materials used to display the baked products attractively
- KU43.** applicable standards and FSSAI regulations pertaining to the production, storage, packaging, labelling and transportation of finished products
- KU44.** environmental practices to dispose the waste materials safely
- KU45.** importance of ensuring a tidy workplace

Generic Skills (GS)

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

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- GS1.** interpret material requirements from customer interactions, production needs, etc. accurately
- GS2.** read and interpret process flowcharts, manufacturer documents, equipment manuals, etc. effectively etc.
- GS3.** write in local language/Hindi/English effectively
- GS4.** communicate with others (such as vendors and customers) effectively
- GS5.** attentively listen and comprehend the information given by the speaker
- GS6.** analyze critical points in day-to-day tasks and identify control measures to solve the issue
- GS7.** plan and prioritise tasks as per work requirements
- GS8.** address issues promptly and effectively
- GS9.** apply domain information in the job as required
- GS10.** manage a team, segregation of work for efficient and effective outcome

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Measure and mix the ingredients</i>	6	14	-	-
PC1. weigh and measure the dry and wet ingredients separately as per the recipe specifications Dry ingredients: flour, sugar, salt, spices, etc. Wet ingredients: cream, fat, water, etc.	-	-	-	-
PC2. sift the ingredients as per requirement Ingredients: flour, baking powder, baking soda, cocoa, starch powder etc.	-	-	-	-
PC3. add yeast to the mix depending on the product to be produced	-	-	-	-
PC4. check the quantity of the mixture and transfer it into the mixer appropriately	-	-	-	-
PC5. add dry ingredient to wet ingredient always at some intervals to avoid gluten formation	-	-	-	-
PC6. set the controls of the mixer (speed, time, temperature, etc.) as per production requirements	-	-	-	-
PC7. monitor the parameters of the mixer/blender to achieve uniform mixing	-	-	-	-
PC8. store the premix at designated areas safely	-	-	-	-
<i>Produce artisanal breads and buns</i>	4	8	-	-
PC9. add ingredients such as emulsifiers, preservatives, colours and flavours etc. into the premix as per requirements	-	-	-	-
PC10. set and control time and temperature of fermented dough/batter depending on product requirement	-	-	-	-
PC11. apply appropriate pressure to punch down the risen dough and place it in the loaf pan for the next fermentation cycle and proofing	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. inspect the quality of the dough thoroughly and check for undesirable characteristics such as cracking, over fermented, under fermented, water absorption capacity, etc.	-	-	-	-
PC13. divide the dough into balls of standard sizes	-	-	-	-
PC14. select the moulds and place the dough balls to ensure it acquires the desired shape	-	-	-	-
<i>Produce artisanal cakes, hard and soft dough products</i>	3	9	-	-
PC15. select the toppings and add them on the dough/batter Toppings: choco chips, cherries, sprinklers, etc.	-	-	-	-
PC16. transfer the batter/dough into moulds of different shapes	-	-	-	-
PC17. cut the dough into desired shape to achieve design as per the product requirement	-	-	-	-
PC18. prepare cream fat as per the recipe formulation	-	-	-	-
PC19. add desired flavours to the cream for icing	-	-	-	-
PC20. apply center filling and sandwich fillings, wherever required	-	-	-	-
<i>Bake the products</i>	5	19	-	-
PC21. pre heat the oven and set the parameters	-	-	-	-
PC22. transfer the dough/ batter into baking pans safely	-	-	-	-
PC23. load the baking pans in the oven and monitor the baking process of different products Products: pastry products, soft cookie doughs, filled and two-dough cookies, cakes, biscuits, breads etc.	-	-	-	-
PC24. place the baked products into a cooling station and let it cool for the specified time	-	-	-	-
PC25. unload and de-pan baked products to cool	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC26. inspect the quality of the baked product and check for defects	-	-	-	-
PC27. apply cream/icing on cookies, biscuits, cakes, pies, etc. using standard methods as per requirements Standard methods: layering, sandwiching, filling, etc.	-	-	-	-
PC28. inspect the product for overfilling or underfilling of cream	-	-	-	-
PC29. inspect the product parameters to ensure desired quality Parameters: texture, flavor, color, odour, height, crumbliness etc.	-	-	-	-
PC30. use sight, feel and skewers to assess the quality of the baked products such as time, temperature, rotating speed, conveyor speed, etc. Products: cake, pie, tart, etc.	-	-	-	-
PC31. handover the samples to the quality lab for testing and final approval Testing: physical, chemical, microbiological, organoleptic, etc.	-	-	-	-
PC32. dispose waste materials safely as per environmental practices	-	-	-	-
<i>Packaging of baked products</i>	3	7	-	-
PC33. load the packaging material on the machine appropriately or arrange the material for manual packaging	-	-	-	-
PC34. transfer the baked products for packaging safely and ensure it is placed properly	-	-	-	-
PC35. monitor the wrapping and labelling process to ensure it follows the specifications	-	-	-	-
PC36. record information (manual, ERP, etc.) of finished products details such as name of the product, batch number, time of packing, date of manufacture, date of expiry, other label details, primary and secondary packaging materials for all finished products, storage conditions, etc. according to the FSSAI standards of packaging and labelling	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC37. store cakes, pastries, pies, tarts and reusable by-products in appropriate environmental conditions	-	-	-	-
<i>Display artisanal baked products</i>	2	4	-	-
PC38. select the type of display for cakes, pastries, pies and tarts in a way that attracts maximum attention	-	-	-	-
PC39. use suitable service wares to present and store baked products on display	-	-	-	-
PC40. adjust the storage conditions for the baked products on display to maintain utmost freshness and quality	-	-	-	-
<i>Manage finished goods and post production activities</i>	7	9	-	-
PC41. inspect the quality of finished products thoroughly before dispatch	-	-	-	-
PC42. coordinate with vendors for distribution and supply of baked products to individuals and organisations	-	-	-	-
PC43. record information for quality and quantity of goods supplied, vendor details, customer details, material receipts, time of shipment, etc.	-	-	-	-
PC44. monitor stocked material (raw material, processed material and finished goods) for desired quality and quantity as per the purchase order	-	-	-	-
PC45. ensure a clean and tidy workplace and take relevant measures against pest infestations and presence of dust, water, etc.	-	-	-	-
PC46. clean the work area, machineries, equipment and tools using appropriate cleaning agents and sanitizers	-	-	-	-
PC47. repair minor faults in the equipment or machines	-	-	-	-
PC48. dispose the waste as per standard operating procedures	-	-	-	-



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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
NOS Total	30	70	-	-

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	FIC/N5007
NOS Name	Produce baked products in artisan bakeries and patisseries
Sector	Food Processing
Sub-Sector	Bread and Bakery
Occupation	Processing-Bread and Bakery
NSQF Level	4
Credits	TBD
Version	2.0
Last Reviewed Date	24/02/2022
Next Review Date	24/02/2025
NSQC Clearance Date	24/02/2022

Qualification Pack

FIC/N9905: Establish facilities for artisanal food production

Description

This NOS is about establishing new or a reworked facility to produce artisanal food products as per regulatory and product-specific processing requirements.

Scope

The scope covers the following :

- Comply with legislative guidelines for a production facility
- Develop recipes for artisanal production
- Obtain materials for setting up production facility
- Perform entrepreneurial activities

Elements and Performance Criteria

Comply with legislative guidelines for a production facility

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

- PC1.** • analyze and investigate purpose and intent of legislation related to various factor
• Factors: food premises, storage facilities, equipment, food production, packaging, labelling of products, etc.
- PC2.** identify the authorities responsible for administering legislation for setting up a food processing facility
- PC3.** assess workplace and food safety systems to determine compliance as per production needs
- PC4.** establish standard procedures to ensure compliance with legal requirements
- PC5.** identify and report non-compliance with the legislative guidelines to the concerned authority as per SOP
- PC6.** ensure accuracy of the recorded information in various forms, checklists, etc. obtained from designated personnel
- PC7.** keep the relevant documentation updated at all times for future reference

Develop recipes for artisanal production

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

- PC8.** formulate recipes and methodologies in accordance with customer needs and product type
- PC9.** conceptualize new ideas and experiment with various combinations of old and new ingredients to develop new products
- PC10.** experiment with new and existing methods of production to develop new production methods for a variety of products
- PC11.** evaluate the quality of production methods by assessing necessary parameters to validate and standardize the best product formulation method
- PC12.** estimate the costs to be incurred for producing the required product as per equipment capacity, material usage, processing, transport, distribution, etc.
- PC13.** calculate the cost of the final product and standardize the unit price of the product considering all the necessary parameters

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Obtain materials for setting up production facility

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

- PC14.** identify the equipment and materials to be procured before setting up a production facility
Materials: raw materials, packaging materials, additives, preservatives Equipment: mixing equipment, premixing equipment, processing equipment, packaging equipment, cleaning equipment, etc.
- PC15.** identify and select vendors for sourcing raw materials, packaging materials, and equipment for production
- PC16.** check and verify the quality of materials received from the vendors as per standards
- PC17.** maintain records of materials obtained and other documents such as equipment manuals, manufacturers' instructions, etc. for future reference

Perform entrepreneurial activities

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

- PC18.** identify own strength and weakness and analyse the gaps for improvement
- PC19.** manage time effectively to minimize work load, anger and stress at workplace
- PC20.** plan different strategies that solve problems, enhance communications and improve work culture
- PC21.** operate computer and its applications to carry out digital initiative such as digital marketing, e-commerce, branding etc.
- PC22.** operate online banking services for seamless transfer of money through NEFT, IMPS, UPI, RTGS
- PC23.** develop a detailed project report to attract good investment opportunities
- PC24.** identify and analyse new business opportunities through various entrepreneurial programs

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** legislation, regulations, and standards to be followed for artisanal production pertaining to facility and production requirements
- KU2.** organizational policy for reporting and documentation
- KU3.** government policies on entrepreneurship
- KU4.** procedure to set-up a production facility
- KU5.** how to make a business plan
- KU6.** applicable FSSAI guidelines to be followed for the establishment of a production facility
- KU7.** importance of obtaining legislative approvals, site inspections, reporting variances, etc. in the job
- KU8.** material and equipment requirements for setting up a production facility
- KU9.** procedure to inspect procured material and equipment for quality
- KU10.** various ingredients used in different recipes
- KU11.** ways to upgrade the existing recipes and developing new ones
- KU12.** applicability and capacity of various equipment used for artisanal production
- KU13.** various calculations performed, cost estimations, and their optimization techniques

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- KU14.** vendor management process
- KU15.** how to handle e commerce
- KU16.** how to analyse performance of self and identify gaps for improvement
- KU17.** importance of time management
- KU18.** how to carry out market research
- KU19.** importance of innovation in business
- KU20.** how to prepare a plan for carrying out various activities as per task requirements
- KU21.** steps followed to operate a computer and its applications
- KU22.** features of online banking and how to transact using various online systems safely
- KU23.** information to be contained in a business report
- KU24.** importance of entrepreneurial programs, how to expand businesses and generate employment opportunities

Generic Skills (GS)

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

- GS1.** read and interpret information such as standards, policies, forms, etc.
- GS2.** communicate with others effectively
- GS3.** plan and prioritize tasks as per work requirements
- GS4.** analyze and report variances promptly

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Comply with legislative guidelines for a production facility</i>	10	25	-	-
PC1. • analyze and investigate purpose and intent of legislation related to various factor • Factors: food premises, storage facilities, equipment, food production, packaging, labelling of products, etc.	-	-	-	-
PC2. identify the authorities responsible for administering legislation for setting up a food processing facility	-	-	-	-
PC3. assess workplace and food safety systems to determine compliance as per production needs	-	-	-	-
PC4. establish standard procedures to ensure compliance with legal requirements	-	-	-	-
PC5. identify and report non-compliance with the legislative guidelines to the concerned authority as per SOP	-	-	-	-
PC6. ensure accuracy of the recorded information in various forms, checklists, etc. obtained from designated personnel	-	-	-	-
PC7. keep the relevant documentation updated at all times for future reference	-	-	-	-
<i>Develop recipes for artisanal production</i>	14	24	-	-
PC8. formulate recipes and methodologies in accordance with customer needs and product type	-	-	-	-
PC9. conceptualize new ideas and experiment with various combinations of old and new ingredients to develop new products	-	-	-	-
PC10. experiment with new and existing methods of production to develop new production methods for a variety of products	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. evaluate the quality of production methods by assessing necessary parameters to validate and standardize the best product formulation method	-	-	-	-
PC12. estimate the costs to be incurred for producing the required product as per equipment capacity, material usage, processing, transport, distribution, etc.	-	-	-	-
PC13. calculate the cost of the final product and standardize the unit price of the product considering all the necessary parameters	-	-	-	-
<i>Obtain materials for setting up production facility</i>	5	8	-	-
PC14. identify the equipment and materials to be procured before setting up a production facility Materials: raw materials, packaging materials, additives, preservatives Equipment: mixing equipment, premixing equipment, processing equipment, packaging equipment, cleaning equipment, etc.	-	-	-	-
PC15. identify and select vendors for sourcing raw materials, packaging materials, and equipment for production	-	-	-	-
PC16. check and verify the quality of materials received from the vendors as per standards	-	-	-	-
PC17. maintain records of materials obtained and other documents such as equipment manuals, manufacturers' instructions, etc. for future reference	-	-	-	-
<i>Perform entrepreneurial activities</i>	7	7	-	-
PC18. identify own strength and weakness and analyse the gaps for improvement	-	-	-	-
PC19. manage time effectively to minimize work load, anger and stress at workplace	-	-	-	-
PC20. plan different strategies that solve problems, enhance communications and improve work culture	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC21. operate computer and its applications to carry out digital initiative such as digital marketing, e-commerce, branding etc.	-	-	-	-
PC22. operate online banking services for seamless transfer of money through NEFT, IMPS, UPI, RTGS	-	-	-	-
PC23. develop a detailed project report to attract good investment opportunities	-	-	-	-
PC24. identify and analyse new business opportunities through various entrepreneurial programs	-	-	-	-
NOS Total	36	64	-	-

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National Occupational Standards (NOS) Parameters

NOS Code	FIC/N9905
NOS Name	Establish facilities for artisanal food production
Sector	Food Processing
Sub-Sector	Generic
Occupation	Generic
NSQF Level	5
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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FIC/N9904: Ensure food safety at the workplace

Description

This unit is about performing various tasks for ensuring food safety at the workplace.

Scope

The scope covers the following :

- Ensure food safety at the workplace

Elements and Performance Criteria

Ensure food safety at the workplace

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

- PC1.** identify the biological, chemical, and physical hazards at various stages of food processing. Stages: procurement of raw material; production, manufacturing, distribution, delivery of finished product, etc.
- PC2.** implement food safety procedures and regulatory policies at the food processing workplace. Policies: Visitor's Policy, Health declaration policy, Jewellery policy, Quality, and safety policy
- PC3.** ensure that the materials are adequately isolated to prevent them from contamination. Materials: raw materials, processed materials, finished goods, etc. Contamination: Physical, Chemical, Biological & shop floor environment
- PC4.** establish and follow Good Manufacturing Practices (GMPs) laid down in applicable Food Safety and Standards Authority of India (FSSAI) guidelines. Good Manufacturing Practices (GMPs): 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 etc.
- PC5.** establish and follow allergen management system for handling and storage of raw materials
- PC6.** establish and follow monitoring systems like Hazard Analysis Critical Control Point (HACCP), product information and consumer awareness, product recall and withdrawal, and traceability HACCP: Hazard identification, identification of critical control points, establish critical limits, corrective and preventive action. Product information and consumer awareness: Product labelling and consumer education. Traceability: forward and backward traceability
- PC7.** take appropriate action in instances such as VACCP (Vulnerability Assessment Critical Control Points) and TACCP (Threat Assessment Critical Control Points)
- PC8.** plan, conduct, manage, consolidate outcomes, and close corrective actions of workplace audit on food safety as per FSSAI guidelines, address the non-conformance with root cause analysis (RCA), corrective action preventive action(CAPA)
- PC9.** address issues pertaining to food safety and quality reported by the team members
- PC10.** record information such as food safety regulations followed, inspections done, faults observed, etc. as per standard procedure
- PC11.** organize trainings and workshops on food safety aspects such as Good Manufacturing Practices (GMP), HACCP, VACCP, TACCP, etc.

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Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** various processes that take place in a food industry
- KU2.** biological, chemical, and physical hazards in a food industry
- KU3.** types of food contaminations, their causes, and ways to prevent it
- KU4.** organisational policy and procedures for ensuring food safety (such as Visitor's Policy, Health declaration policy, Jewelry policy, Quality, and safety policy)
- KU5.** applicable regulations for ensuring food safety as listed in 'The Food Safety and Standards Act, 2006'
- KU6.** role of HACCP in food industry, its constituents and procedure to implement it in an organisation
- KU7.** VACCP and TACCP and how to implement it effectively
- KU8.** how to conduct workplace food safety audits
- KU9.** types of allergen and allergen management at workplace
- KU10.** key observations and corrective actions to be applied for ensuring food safety
- KU11.** various issues that can arise during production and other processes as faced by team
- KU12.** information to be recorded in the work process
- KU13.** how to do root cause analysis and perform corrective action and preventive actions
- KU14.** how to conduct training of workforce on various food safety procedures such as GMP, HACCP, information to be shared, ways to report accidents, escalation of issues beyond own scope, etc.

Generic Skills (GS)

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 and symbols
- GS3.** read and comprehend basic English to read product manuals for safe operation
- GS4.** question coworkers appropriately in order to clarify instructions and other issues
- GS5.** make appropriate decisions pertaining to the concerned area of work regarding the work objective, span of authority, responsibility, laid down procedure and guidelines
- GS6.** plan and organize the work schedule, work area, tools, equipment, and materials for improved productivity
- GS7.** identify probable solutions to the problems in hand
- GS8.** evaluate proposed solution with respect to key priorities and considerations
- GS9.** seek official and authorised sources of help and guidance to resolve problems that cannot be solved at one's level of authority
- GS10.** identify cause and effect relations in their area of work to anticipate potential problems and their solution
- GS11.** analyse the problem, suggest corrective actions and implement workable solutions

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Ensure food safety at the workplace</i>	30	70	-	-
PC1. identify the biological, chemical, and physical hazards at various stages of food processing. Stages: procurement of raw material; production, manufacturing, distribution, delivery of finished product, etc.	-	-	-	-
PC2. implement food safety procedures and regulatory policies at the food processing workplace. Policies: Visitor's Policy, Health declaration policy, Jewellery policy, Quality, and safety policy	-	-	-	-
PC3. ensure that the materials are adequately isolated to prevent them from contamination. Materials: raw materials, processed materials, finished goods, etc. Contamination: Physical, Chemical, Biological & shop floor environment	-	-	-	-
PC4. establish and follow Good Manufacturing Practices (GMPs) laid down in applicable Food Safety and Standards Authority of India (FSSAI) guidelines. Good Manufacturing Practices (GMPs): 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 etc.	-	-	-	-
PC5. establish and follow allergen management system for handling and storage of raw materials	-	-	-	-
PC6. establish and follow monitoring systems like Hazard Analysis Critical Control Point (HACCP), product information and consumer awareness, product recall and withdrawal, and traceability HACCP: Hazard identification, identification of critical control points, establish critical limits, corrective and preventive action. Product information and consumer awareness: Product labelling and consumer education. Traceability: forward and backward traceability	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC7. take appropriate action in instances such as VACCP (Vulnerability Assessment Critical Control Points) and TACCP (Threat Assessment Critical Control Points)	-	-	-	-
PC8. plan, conduct, manage, consolidate outcomes, and close corrective actions of workplace audit on food safety as per FSSAI guidelines, address the non-conformance with root cause analysis (RCA), corrective action preventive action(CAPA)	-	-	-	-
PC9. address issues pertaining to food safety and quality reported by the team members	-	-	-	-
PC10. record information such as food safety regulations followed, inspections done, faults observed, etc. as per standard procedure	-	-	-	-
PC11. organize trainings and workshops on food safety aspects such as Good Manufacturing Practices (GMP), HACCP, VACCP, TACCP, etc.	-	-	-	-
NOS Total	30	70	-	-

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National Occupational Standards (NOS) Parameters

NOS Code	FIC/N9904
NOS Name	Ensure food safety at the workplace
Sector	Food Processing
Sub-Sector	Generic
Occupation	Generic
NSQF Level	5
Credits	TBD
Version	1.0
Last Reviewed Date	24/02/2022
Next Review Date	24/02/2025
NSQ Clearance Date	24/02/2022

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FIC/N9903: Ensure workplace health and safety

Description

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

Scope

The scope covers the following :

- Follow preventive measures to avoid accidents
- Deal with emergencies
- Manage infection control

Elements and Performance Criteria

Follow preventive measures to avoid accidents

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

- PC1.** wear appropriate personal protective equipment (PPE) as per task requirements. PPE: gloves, hairnets, masks, ear plugs, goggles, shoes etc.
- PC2.** identify job-site hazardous work and possible causes of risk or accident at the workplace
- PC3.** deal with hazards safely and appropriately to ensure safety of self and others
- PC4.** ensure that the equipment used (such as for lifting and carrying materials, power tools, etc.) are maintained effectively
- PC5.** implement organisational safety protocols to prevent accidents and hazards
- PC6.** ensure that general health and safety equipment are readily available at all times
- PC7.** ensure that common hazard signs are displayed properly wherever required
- PC8.** use various types of fire extinguishers effectively
- PC9.** train the workforce on accident prevention techniques required at the workplace. Accident prevention techniques: role of appropriate PPE; use of fire extinguishers, dealing with hazards; identification of risks that could lead to accidents; safety protocols followed to avoid accidents; role of different types of hazard signs, safe lifting and carrying practices, etc.

Deal with emergencies

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

- PC10.** follow workplace emergency and evacuation procedures
- PC11.** use safe methods to free a person from electrocution
- PC12.** administer appropriate first aid to victims in case of cuts, bleeding, burns, choking, electric shock, poisoning, etc.
- PC13.** provide artificial respiration and cardio-pulmonary resuscitation (CPR) in various instances (e.g., cardiac arrest)
- PC14.** report any identified breaches in health, safety and security policies and procedures to the concerned authority

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PC15. train the workforce on emergency procedures to be followed at the workplace. Emergency procedures: safe evacuation; treating a person from electrocution; immediate first aid to be given at times of cuts, bleeding, burns, choking, electric shock, poisoning, etc.; administering artificial respiration and cardio-pulmonary resuscitation (CPR); escalating issues beyond own scope, etc.

Manage infection control

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

- PC16.** follow and enforce Good Hygiene Practices (GHP) among the team. GHP: washing hands regularly, reporting personal health issues to the concerned, undertaking preventive health check-ups at regular intervals, getting vaccinated as per standard procedures whenever required, etc.
- PC17.** identify the type of infection spread in discussion with designated personnel and relevant sources. Type of infection spread: severity; precautions to be taken; safety protocols to be followed during spread; sanitisers to be used, etc.
- PC18.** ensure the work area, equipment and related facilities are being sanitised effectively as per organisational schedule and work requirements
- PC19.** ensure that materials used for sanitisation are stored appropriately and readily available at times of need
- PC20.** take appropriate action at times of illness to self and others in the team
- PC21.** train the workforce on infection control practices followed at the workplace. Infection control practices: precautions to be taken; types of sanitisers to be used; ensuring appropriate sanitization of self and work area; reporting illness to self and others promptly, etc.
- PC22.** review standard operating procedures (SOPs) as per organisational schedule to ensure compliance with regulatory requirements
- PC23.** ensure periodic health check-up of all workers in compliance with FSSAI guidelines
- PC24.** provide regulatory support and process improvements which have an impact on regulatory affairs related to quality and safety assurance in respective departments

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** meaning of 'hazards' and 'risks'
- KU2.** various types of risks, hazards and accidents at the workplace and their possible causes
- KU3.** standard practices to be followed to control and prevent risks, hazards, and accidents
- KU4.** where to find all the general health and safety equipment in the workplace
- KU5.** parameters to be assessed during review of SOPs and compliances
- KU6.** how to improve regulations and processes in an organisation as per required quality and safety standards
- KU7.** procedure to conduct audits pertaining to workplace health and safety
- KU8.** parameters to be assessed during health and safety audits and acceptability levels of appropriateness
- KU9.** how to address team issues relating to workplace health and safety
- KU10.** documents and records to be maintained in the work process

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- KU11.** types of personal protective equipment used such as eye protection, hard hats, gloves apron, rubber boots, etc. and its importance while conducting the tasks
- KU12.** how to deal with various types of hazards safely and appropriately
- KU13.** how to ensure that the equipment used is maintained effectively
- KU14.** preventative measures and remedial actions to be taken to avoid accidents
- KU15.** various types of safety signs and their relevance at the workplace
- KU16.** various causes of fire, ways to prevent them and rescue techniques to be followed at times of fire
- KU17.** use of different types of fire extinguishers
- KU18.** how to train the workforce on various accident prevention techniques
- KU19.** workplace emergency and evacuation procedures
- KU20.** how to administer immediate first aid to victims in case of cuts, bleeding, burns, choking, electric shock, poisoning, etc.
- KU21.** procedure followed for providing artificial respiration and cardio-pulmonary resuscitation (CPR) to the affected
- KU22.** impact of breach in health, safety and security policies and procedures on self, team, and work process
- KU23.** how to train the workforce on emergency procedures to be followed at the workplace
- KU24.** information sources and the factors to be considered for determining the type of infection
- KU25.** procedure to carry out sanitization of work area, equipment, and related facilities
- KU26.** how to act at times of illness to self and others at the workplace
- KU27.** train the workforce on infection control practices followed at the workplace
- KU28.** storing sanitization materials appropriately

Generic Skills (GS)

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 and symbols
- GS3.** read and comprehend basic English to read product manuals for safe operation
- GS4.** question coworkers appropriately in order to clarify instructions and other issues
- GS5.** make appropriate decisions pertaining to the concerned area of work regarding the work objective, span of authority, responsibility, laid down procedure and guidelines
- GS6.** plan and organize the work schedule, work area, tools, equipment, and materials for improved productivity
- GS7.** identify probable solutions to the problems in hand
- GS8.** evaluate proposed solution with respect to key priorities and considerations
- GS9.** seek official and authorised sources of help and guidance to resolve problems that cannot be solved at one's level of authority
- GS10.** identify cause and effect relations in their area of work to anticipate potential problems and their solution

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Follow preventive measures to avoid accidents</i>	13	31	-	-
PC1. wear appropriate personal protective equipment (PPE) as per task requirements. PPE: gloves, hairnets, masks, ear plugs, goggles, shoes etc.	-	-	-	-
PC2. identify job-site hazardous work and possible causes of risk or accident at the workplace	-	-	-	-
PC3. deal with hazards safely and appropriately to ensure safety of self and others	-	-	-	-
PC4. ensure that the equipment used (such as for lifting and carrying materials, power tools, etc.) are maintained effectively	-	-	-	-
PC5. implement organisational safety protocols to prevent accidents and hazards	-	-	-	-
PC6. ensure that general health and safety equipment are readily available at all times	-	-	-	-
PC7. ensure that common hazard signs are displayed properly wherever required	-	-	-	-
PC8. use various types of fire extinguishers effectively	-	-	-	-
PC9. train the workforce on accident prevention techniques required at the workplace. Accident prevention techniques: role of appropriate PPE; use of fire extinguishers, dealing with hazards; identification of risks that could lead to accidents; safety protocols followed to avoid accidents; role of different types of hazard signs, safe lifting and carrying practices, etc.	-	-	-	-
<i>Deal with emergencies</i>	8	18	-	-
PC10. follow workplace emergency and evacuation procedures	-	-	-	-
PC11. use safe methods to free a person from electrocution	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. administer appropriate first aid to victims in case of cuts, bleeding, burns, choking, electric shock, poisoning, etc.	-	-	-	-
PC13. provide artificial respiration and cardio-pulmonary resuscitation (CPR) in various instances (e.g., cardiac arrest)	-	-	-	-
PC14. report any identified breaches in health, safety and security policies and procedures to the concerned authority	-	-	-	-
PC15. train the workforce on emergency procedures to be followed at the workplace. Emergency procedures: safe evacuation; treating a person from electrocution; immediate first aid to be given at times of cuts, bleeding, burns, choking, electric shock, poisoning, etc.; administering artificial respiration and cardio-pulmonary resuscitation (CPR); escalating issues beyond own scope, etc.	-	-	-	-
<i>Manage infection control</i>	9	21	-	-
PC16. follow and enforce Good Hygiene Practices (GHP) among the team. GHP: washing hands regularly, reporting personal health issues to the concerned, undertaking preventive health check-ups at regular intervals, getting vaccinated as per standard procedures whenever required, etc.	-	-	-	-
PC17. identify the type of infection spread in discussion with designated personnel and relevant sources. Type of infection spread: severity; precautions to be taken; safety protocols to be followed during spread; sanitisers to be used, etc.	-	-	-	-
PC18. ensure the work area, equipment and related facilities are being sanitised effectively as per organisational schedule and work requirements	-	-	-	-
PC19. ensure that materials used for sanitisation are stored appropriately and readily available at times of need	-	-	-	-
PC20. take appropriate action at times of illness to self and others in the team	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC21. train the workforce on infection control practices followed at the workplace. Infection control practices: precautions to be taken; types of sanitisers to be used; ensuring appropriate sanitization of self and work area; reporting illness to self and others promptly, etc.	-	-	-	-
PC22. review standard operating procedures (SOPs) as per organisational schedule to ensure compliance with regulatory requirements	-	-	-	-
PC23. ensure periodic health check-up of all workers in compliance with FSSAI guidelines	-	-	-	-
PC24. provide regulatory support and process improvements which have an impact on regulatory affairs related to quality and safety assurance in respective departments	-	-	-	-
NOS Total	30	70	-	-

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National Occupational Standards (NOS) Parameters

NOS Code	FIC/N9903
NOS Name	Ensure workplace health and safety
Sector	Food Processing
Sub-Sector	Generic
Occupation	Generic
NSQF Level	5
Credits	TBD
Version	1.0
Last Reviewed Date	24/02/2022
Next Review Date	24/02/2025
NSQ 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	-	-

Qualification Pack

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

Qualification Pack

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:

Qualification Pack

- 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 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.

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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/N5002.Prepare for production of baked products in artisan bakeries and patisseries	30	70	-	-	100	25
FIC/N5007.Produce baked products in artisan bakeries and patisseries	30	70	-	-	100	25
FIC/N9905.Establish facilities for artisanal food production	36	64	-	-	100	20
FIC/N9904.Ensure food safety at the workplace	30	70	-	-	100	10
FIC/N9903.Ensure workplace health and safety	30	70	-	-	100	10
FIC/N9902.Work effectively in an organisation	22	39	-	-	61	5
SGJ/N1702.Optimize resource utilization at workplace	13	26	-	-	39	5
Total	191	409	-	-	600	100

Qualification Pack

Acronyms

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training
SOP	Standard Operating Procedures
NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training
NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training
PwD	Persons with Disability

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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.
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.

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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.
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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.
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Qualification Pack

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Technical knowledge	<p>Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.</p>
Core skills or Generic Skills	<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 and work environment. In the context of the OS, these include communication-related skills that are applicable to most job roles.</p>