









Craft Baker

QP Code: FIC/Q5002

Version: 5.0

NSQF Level: 4

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FIC/Q5002: Craft Baker

Brief Job Description

A Craft Baker specializes in producing a diverse range of artisanal bakery products, including breads, buns, cakes, pastries, rusk, and more, on a small scale for the retail market. The role involves sourcing high-quality raw materials, ensuring the production of premium baked goods, and coordinating with vendors for timely product delivery. Throughout the process, the individual follows best practices and implements necessary measures to maintain food safety and hygiene in the workplace.

Personal Attributes

The individual should be a quick learner, a critical thinker, and a creative problem-solver with strong leadership skills. They must communicate effectively, plan, organize, and prioritize tasks based on work requirements. Additionally, they should be adept at addressing customer needs efficiently.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

- 1. FIC/N9905: Establish facilities for artisanal food production
- 2. FIC/N5002: Prepare for production of baked products in artisan bakeries and patisseries
- 3. FIC/N5007: Produce baked products in artisan bakeries and patisseries
- 4. FIC/N9906: Apply food safety guidelines in Food Processing
- 5. FIC/N9903: Ensure workplace health and safety
- 6. DGT/VSQ/N0101: Employability Skills (30 Hours)

Qualification Pack (QP) Parameters

Sector	Food Processing
Sub-Sector	Bread and Bakery
Occupation	Processing-Bread and Bakery
Country	India
NSQF Level	4









Credits	15
Aligned to NCO/ISCO/ISIC Code	NCO-2015/7512.9900
Minimum Educational Qualification & Experience	12th grade Pass (or equivalent) OR 10th grade pass with 3 Years of experience in Food Industry or Artisanal Bakery OR Previous relevant Qualification of NSQF Level (3.0) with 3 Years of experience in Food Industry or Artisanal Bakery OR Previous relevant Qualification of NSQF Level (3.5) with 1.5 years of experience in Food Industry or Artisanal Bakery
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	NA
Next Review Date	08/05/2028
NSQC Approval Date	08/05/2025
Version	5.0
Reference code on NQR	QG-04-FI-04000-2025-V2-FICSI
NQR Version	3.0

Remarks:

NA









FIC/N9905: Establish facilities for artisanal food production

Description

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

Scope

The scope covers the following:

- Comply with applicable legislation
- Develop recipes for artisanal production
- Procure materials to set up production facility
- Perform entrepreneurial activities

Elements and Performance Criteria

Comply with applicable legislation

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

- **PC1.** analyze the legislation relevant to food premises, storage, equipment, production, packaging, and labelling
- PC2. identify authorities responsible for enforcing legislation for food processing facilities
- **PC3.** assess workplace and food safety systems for compliance with production requirements
- **PC4.** establish procedures to ensure legal compliance
- **PC5.** follow updates to legislation and standards, ensuring ongoing compliance
- **PC6.** report non-compliance with legislative guidelines to authorities as per the SOP
- **PC7.** ensure vendor compliance with relevant regulations through regular audits
- **PC8.** ensure accuracy of recorded information in forms, checklists, etc., from designated personnel
- **PC9.** maintain updated documentation for future reference

Develop recipes for artisanal production

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

- **PC10.** formulate recipes and methods based on customer needs and product types
- **PC11.** innovate by experimenting with ingredient combinations to develop new products
- PC12. experiment with production methods to standardize and optimize processes
- **PC13.** evaluate production methods by assessing key parameters to standardize the best formulation
- **PC14.** incorporate customer feedback into recipe development and product innovation
- **PC15.** estimate production costs, considering equipment capacity, materials, processing, and distribution
- **PC16.** calculate and standardize the final product cost, considering the applicable parameters *Procure materials to set up production facility*

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









- **PC17.** identify the necessary equipment and materials (e.g. raw materials, packaging, additives, preservatives, mixing, processing, and packaging equipment)
- PC18. identify vendors for sourcing raw materials, packaging, and equipment
- **PC19.** negotiate and select appropriate vendors based on relevant parameters, e.g. quality and cost
- **PC20.** procure the raw materials, packaging, and equipment as per the requirement
- **PC21.** check the quality of received materials to ensure compliance with applicable standards
- **PC22.** use sustainable materials and practices in production
- PC23. maintain records of materials and related documents for future reference

Perform entrepreneurial activities

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

- PC24. assess personal strengths and weaknesses and identify areas for improvement
- PC25. manage time effectively to reduce workload, stress, and dissatisfaction at the workplace
- **PC26.** calculate product costs accurately by factoring in raw materials, labour, overheads, and distribution to ensure profitability and competitive pricing
- **PC27.** plan strategies to solve problems, enhance communication, and improve work culture
- PC28. identify and mitigate risks associated with production, including supply chain disruptions
- **PC29.** utilize digital tools for marketing, e-commerce, and branding
- **PC30.** use online banking services for seamless financial transactions
- **PC31.** develop detailed project reports to attract investment opportunities
- PC32. identify and analyze new business opportunities through entrepreneurial programs

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** the government policies on entrepreneurship
- **KU2.** the laws and regulations related to food premises, storage, equipment, production, packaging, and labeling
- **KU3.** the role of regulatory authorities like the Food Safety and Standards Authority of India (FSSAI)
- **KU4.** the licensing and permit requirements for artisanal food production
- **KU5.** the workplace safety standards (e.g., OSHA regulations) and food safety systems like Hazard Analysis and Critical Control Points (HACCP) and ISO 22000
- **KU6.** the process of assessing compliance with production requirements, including sanitation, employee safety, and food handling protocols
- **KU7.** how to develop, implement, and monitor procedures to ensure ongoing legal compliance within the facility
- **KU8.** the standard operating procedures (SOPs) for reporting non-compliance and maintaining accurate and updated records for audits and inspections
- **KU9.** the documentation standards for compliance, including how to prepare forms, checklists, and reports









- **KU10.** how to audit vendors and suppliers to ensure they meet the required legal and quality standards
- **KU11.** the customer preferences and dietary needs to tailor products accordingly
- **KU12.** the techniques for experimenting with new ingredient combinations and production methods
- **KU13.** the process of conducting trials and evaluating outcomes to optimize recipes and production methods
- **KU14.** the process of standardizing recipes and methods by controlling variables such as ingredient quality, processing times, and environmental conditions
- **KU15.** the methods to gather, analyze, and incorporate customer feedback into recipe development and product innovation
- **KU16.** the cost estimation techniques, including how to calculate costs related to materials, equipment, processing, and distribution
- **KU17.** the financial management principles to standardize product pricing and ensure profitability
- **KU18.** the types and specifications of equipment required for artisanal food production, including mixing, processing, and packaging machines
- **KU19.** the types of raw materials, packaging options, additives, and preservatives commonly used in artisanal food production
- **KU20.** the criteria for selecting vendors based on quality, cost, and sustainability
- **KU21.** the negotiation strategies to secure favourable terms with suppliers
- **KU22.** the quality assurance processes to verify received materials meet applicable standards and specifications
- **KU23.** the sustainable sourcing practices, including the use of eco-friendly materials and methods to minimize environmental impact
- **KU24.** the best practices for maintaining records of materials, vendor interactions, and related documentation for future audits and reference
- **KU25.** the self-assessment techniques to evaluate personal strengths, weaknesses, and areas for improvement
- **KU26.** the time management strategies to optimize productivity and reduce workplace stress
- **KU27.** the problem-solving frameworks, communication enhancement strategies, and methods to improve workplace culture
- **KU28.** the risks associated with artisanal production, including supply chain vulnerabilities and how to mitigate them
- **KU29.** the use of appropriate risk assessment tools and techniques to identify and manage potential disruptions
- **KU30.** the use of digital marketing strategies, including the use of e-commerce platforms, social media, and branding techniques
- **KU31.** how to use online banking services for business transactions
- **KU32.** how to develop detailed project reports to attract investment and funding
- **KU33.** the entrepreneurial programs and techniques to identify and analyze new business opportunities

Generic Skills (GS)

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









- **GS1.** communicate information clearly and concisely to team members and supervisors
- **GS2.** read, interpret, and write simple instructions, reports, and documentation
- **GS3.** perform appropriate arithmetic operations such as addition, subtraction, multiplication, and division
- **GS4.** use basic IT tools and applications for effective data management
- **GS5.** work effectively in a team, supporting colleagues and contributing to team goals
- **GS6.** assist others, share knowledge, and seek help, when necessary
- **GS7.** manage time effectively and prioritize tasks to meet deadlines
- **GS8.** adapt to changing work environments, tasks, and processes
- **GS9.** focus on tasks and ensure accuracy in work
- **GS10.** identify and solve routine problems that arise during job performance
- **GS11.** assess situations, consider potential solutions, and implement the best course of action
- **GS12.** follow the estabished procedures to avoid errors and accidents









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Comply with applicable legislation	9	11	-	6
PC1. analyze the legislation relevant to food premises, storage, equipment, production, packaging, and labelling	1	1	-	0.5
PC2. identify authorities responsible for enforcing legislation for food processing facilities	1	2	-	0.5
PC3. assess workplace and food safety systems for compliance with production requirements	1	1	-	1
PC4. establish procedures to ensure legal compliance	1	2	-	0.5
PC5. follow updates to legislation and standards, ensuring ongoing compliance	1	1	-	0.5
PC6. report non-compliance with legislative guidelines to authorities as per the SOP	1	1	-	1
PC7. ensure vendor compliance with relevant regulations through regular audits	1	1	-	0.5
PC8. ensure accuracy of recorded information in forms, checklists, etc., from designated personnel	1	1	-	0.5
PC9. maintain updated documentation for future reference	1	1	-	1
Develop recipes for artisanal production	6	13	-	5
PC10. formulate recipes and methods based on customer needs and product types	0.5	1	-	1
PC11. innovate by experimenting with ingredient combinations to develop new products	0.5	1	_	1
PC12. experiment with production methods to standardize and optimize processes	1	2	-	0.5
PC13. evaluate production methods by assessing key parameters to standardize the best formulation	1	2	-	0.5









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC14. incorporate customer feedback into recipe development and product innovation	1	2	-	0.5
PC15. estimate production costs, considering equipment capacity, materials, processing, and distribution	1	3	-	0.5
PC16. calculate and standardize the final product cost, considering the applicable parameters	1	2	-	1
Procure materials to set up production facility	7	10	-	4
PC17. identify the necessary equipment and materials (e.g. raw materials, packaging, additives, preservatives, mixing, processing, and packaging equipment)	1	1	-	0.5
PC18. identify vendors for sourcing raw materials, packaging, and equipment	1	1	-	0.5
PC19. negotiate and select appropriate vendors based on relevant parameters, e.g. quality and cost	1	1	-	0.5
PC20. procure the raw materials, packaging, and equipment as per the requirement	1	2	-	0.5
PC21. check the quality of received materials to ensure compliance with applicable standards	1	1	-	1
PC22. use sustainable materials and practices in production	1	2	-	0.5
PC23. maintain records of materials and related documents for future reference	1	2	-	0.5
Perform entrepreneurial activities	8	16	-	5
PC24. assess personal strengths and weaknesses and identify areas for improvement	1	2	-	0.5
PC25. manage time effectively to reduce workload, stress, and dissatisfaction at the workplace	0.5	1	-	0.5









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC26. calculate product costs accurately by factoring in raw materials, labour, overheads, and distribution to ensure profitability and competitive pricing	0.5	1	-	0.5
PC27. plan strategies to solve problems, enhance communication, and improve work culture	1	2	-	0.5
PC28. identify and mitigate risks associated with production, including supply chain disruptions	1	2	-	0.5
PC29. utilize digital tools for marketing, ecommerce, and branding	1	2	-	0.5
PC30. use online banking services for seamless financial transactions	1	2	-	0.5
PC31. develop detailed project reports to attract investment opportunities	1	2	-	0.5
PC32. identify and analyze new business opportunities through entrepreneurial programs	1	2	-	1
NOS Total	30	50	-	20









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	4
Version	2.0
Last Reviewed Date	08/05/2025
Next Review Date	08/05/2028
NSQC Clearance Date	08/05/2025









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, organizations, and market trends
- **PC2.** identify the type of bakery products to be manufactured, including artisanal methods, manual processes, and small-batch production requirements, along with tools and equipment needed
- **PC3.** document a standardized production plan for producing artisanal bakery products, ensuring recipe standardization, validation processes, and consistency
- **PC4.** plan the production process by referring to process flow charts, formulation charts, and best practices for artisanal methods
- **PC5.** check the availability of raw materials, packaging materials, equipment, and manpower required for production, ensuring seasonal, fresh, and locally sourced ingredients
- **PC6.** plan the batch size based on the production order, machine capacity, and manual processing constraints
- **PC7.** calculate material requirements for the baking process and prepare the indent, accordingly, considering small-batch efficiency
- **PC8.** submit requirements, including indent, to the concerned personnel and address their queries promptly

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 the effectiveness of cleaning and sanitation programs









PC12. dispose of waste materials from the work area safely as per standard operating procedures (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 proper functioning
- **PC14.** clean the production tools, equipment, and machinery thoroughly and calibrate them appropriately
- **PC15.** assemble the materials and tools 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.** test samples thoroughly using sensory and manual evaluations such as touch, smell, and taste, alongside necessary chemical and biological testing
- **PC17.** report substandard quality ingredients, ensuring documentation of quality issues for future reference
- **PC18.** store the ingredients as per the standards set for artisanal production
- **PC19.** record information such as materials received, batch size, and quality of products to ensure consistency in production
- **PC20.** establish a small lab setup for conducting necessary sensory and quality evaluations to maintain artisanal product standards

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** the basics of baking science
- **KU2.** the characteristics of various types of artisanal baked products such as cakes, pastries, breads, buns, rolls, cookies, and other sweet dough products
- **KU3.** the importance of manual processes and small-batch production in artisanal baking
- **KU4.** the raw materials required for artisanal bakery- flour, sugar, fat, oil, water, food additives etc.
- **KU5.** the required packaging material like carton, box, duplex, laminates, decorating items, etc.
- **KU6.** how to use the equipment like flour sifter, mixer, oven, etc.
- **KU7.** the biological, chemical, and physical properties of the ingredients and their impact on the final product
- **KU8.** calculation of material requirements and preparation of indents to align with production needs
- **KU9.** tools and equipment required for artisanal baking and their maintenance, including manual and small-scale machinery
- **KU10.** the steps involved in craft baking, including sequence of operations for producing baked products
- **KU11.** processes such as fermentation, mixing, baking, moulding, cutting, and slicing, and the techniques used in their implementation
- **KU12.** the importance of premixing, handling, weighing, and sieving ingredients in artisanal production









- **KU13.** optimal conditions such as temperature and storage time to be maintained during the production process
- **KU14.** different methods of shaping dough, such as moulding, cutting, slicing, and laminating
- **KU15.** calibration and maintenance of equipment and tools to ensure quality production
- **KU16.** the standards, policies, and procedures related to quality, food safety, health and safety, hazard handling, waste disposal, and documentation
- **KU17.** cleaning and disinfection of work areas, tools, and equipment, including potential allergens associated with the manufacturing process
- **KU18.** supplier and manufacturer instructions regarding the cleaning and upkeep of production machinery
- **KU19.** the food safety standards and applicable FSSAI regulations relevant to artisanal baking
- **KU20.** potential food safety risks and control procedures associated with the job
- **KU21.** documentation of raw material testing, batch processing, and final product quality to ensure consistency
- **KU22.** storage requirements for raw materials to maintain freshness and prevent contamination
- **KU23.** importance of ensuring a tidy and organized workplace for efficient production

Generic Skills (GS)

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

- **GS1.** interpret material requirements from customer interactions and production needs
- **GS2.** read and interpret process flowcharts, manufacturer documents, and equipment manuals effectively
- **GS3.** write in the local language, Hindi, or English effectively for documentation and communication
- **GS4.** communicate effectively with vendors, customers, and team members
- **GS5.** listen attentively and comprehend information given by others
- **GS6.** analyze critical points in day-to-day tasks and identify control measures for issue resolution
- **GS7.** plan and prioritize tasks based on work requirements
- **GS8.** address issues promptly and effectively
- **GS9.** apply domain knowledge and skills effectively in job-related tasks
- **GS10.** manage a team and segregate work efficiently for better outcomes









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Plan to produce artisanal baked products	10	17	-	8
PC1. obtain work requirements from various sources such as individuals, organizations, and market trends	1	2	-	1
PC2. identify the type of bakery products to be manufactured, including artisanal methods, manual processes, and small-batch production requirements, along with tools and equipment needed	2	3	-	1
PC3. document a standardized production plan for producing artisanal bakery products, ensuring recipe standardization, validation processes, and consistency	1	2	-	1
PC4. plan the production process by referring to process flow charts, formulation charts, and best practices for artisanal methods	1	2	-	1
PC5. check the availability of raw materials, packaging materials, equipment, and manpower required for production, ensuring seasonal, fresh, and locally sourced ingredients	2	2	-	1
PC6. plan the batch size based on the production order, machine capacity, and manual processing constraints	1	2	-	1
PC7. calculate material requirements for the baking process and prepare the indent, accordingly, considering small-batch efficiency	1	2	-	1
PC8. submit requirements, including indent, to the concerned personnel and address their queries promptly	1	2	-	1
Maintain work area for production	6	10	-	4
PC9. inspect the work area for the presence of waste and hazardous materials	2	2	-	1
PC10. clean the work area using industry-approved sanitizers and chemical agents thoroughly	2	3	-	1









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. establish inspection and verification methods to evaluate the effectiveness of cleaning and sanitation programs	1	3	-	1
PC12. dispose of waste materials from the work area safely as per standard operating procedures (SOP)	1	2	-	1
Maintain process machinery and tools	4	8	-	3
PC13. inspect the production tools, equipment, and machinery for proper functioning	1	3	-	1
PC14. clean the production tools, equipment, and machinery thoroughly and calibrate them appropriately	1	3	-	1
PC15. assemble the materials and tools to be used as per standard work practices	2	2	-	1
Select and test materials for production	10	15	-	5
PC16. test samples thoroughly using sensory and manual evaluations such as touch, smell, and taste, alongside necessary chemical and biological testing	2	3	-	1
PC17. report substandard quality ingredients, ensuring documentation of quality issues for future reference	2	3	-	1
PC18. store the ingredients as per the standards set for artisanal production	2	3	-	1
PC19. record information such as materials received, batch size, and quality of products to ensure consistency in production	2	3	-	1
PC20. establish a small lab setup for conducting necessary sensory and quality evaluations to maintain artisanal product standards	2	3	-	1
NOS Total	30	50	-	20









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	2
Version	3.0
Last Reviewed Date	08/05/2025
Next Review Date	08/05/2028
NSQC Clearance Date	08/05/2025









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

Description

This NOS covers the complete process of producing various baked products in an artisan bakery, ensuring adherence to quality standards, food safety norms, and best practices. It includes preparation, measuring, mixing, shaping, baking, packaging, and displaying artisanal products.

Scope

The scope covers the following:

- Measuring and mixing ingredients
- Shaping and molding
- · Baking process
- Producing artisanal breads and buns
- Producing artisanal cakes-different flavors and varieties
- Producing cookies, rusk, and puff pastries
- Packaging baked products
- Displaying artisanal baked products
- Managing finished goods and post-production activities

Elements and Performance Criteria

Measuring and mixing ingredients

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

- **PC1.** plan the baking process by selecting appropriate recipes and required ingredients
- PC2. weigh and measure dry and wet ingredients as per recipe specifications
- **PC3.** sift and combine dry ingredients such as flour, baking powder, baking soda, cocoa, starch powder etc.
- **PC4.** add yeast to the mix depending on the product to be produced
- **PC5.** check the quantity of the mixture and transfer it into the mixer appropriately
- **PC6.** gradually mix dry ingredients into wet ingredients to prevent gluten formation
- **PC7.** monitor mixing parameters such as speed, time, and temperature
- PC8. store prepared mixes safely in designated areas

Shaping and molding

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

- **PC9.** prepare and knead the mixture (dough or batter) to achieve the required consistency based on the product type, including bread, pastries, cookies, and cakes
- **PC10.** select appropriate shapes, molds, trays, or shaping tools and pour or mold the mixture into suitable forms according to product specifications for various baked goods, including cakes, cookies, bread, and pastries
- **PC11.** apply necessary fillings, layers, toppings, or decorations based on the product requirements
- **PC12.** allow shaped products to rest, ferment, proof, or set as needed before baking or final processing









Baking process

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

- **PC13.** preheat ovens and set baking parameters based on product requirements
- **PC14.** load baking trays or molds into the oven safely
- PC15. monitor baking times and temperatures to achieve optimal texture and flavor
- **PC16.** rotate trays if required to ensure even baking
- **PC17.** remove baked goods and transfer them to a cooling station
- **PC18.** inspect the product parameters to ensure desired quality Parameters: texture, flavor, color, odour, height, crumbliness etc.
- **PC19.** 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.
- **PC20.** handover the samples to the quality lab for testing and final approval Testing: physical, chemical, microbiological, organoleptic, etc.

Producing artisanal breads and buns

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

- **PC21.** add ingredients such as emulsifiers, preservatives, colours and flavours etc. into the premix as per requirements
- **PC22.** prepare and ferment dough using appropriate techniques for various baked goods, such as sourdough, brioche, whole wheat bread, multigrain bread, baguettes, burger buns, dinner rolls, and croissants
- **PC23.** monitor proofing and fermentation times to ensure proper texture and flavor development
- **PC24.** apply appropriate pressure to punch down the risen dough and place it in the loaf pan for the next fermentation cycle and proofing
- **PC25.** inspect the quality of the dough thoroughly and check for undesirable characteristics such as cracking, over fermented, under fermented, water absorption capacity, etc.
- **PC26.** divide the dough into balls of standard sizes, select appropriate molds, and place the dough balls to ensure they acquire the desired shape
- **PC27.** apply scoring, glazing, or toppings as per recipe requirements for different products, including seeded bread, milk buns, and laminated pastries like croissants and Danish pastries
- **PC28.** bake breads (e.g., white bread, rye bread, ciabatta), buns (e.g., hot dog buns, brioche buns), and croissants at controlled temperatures for the required duration.
- **PC29.** cool and store finished products under suitable conditions to maintain freshness and quality.

Producing artisanal cakes—different flavors and varieties

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

- **PC30.** prepare cake batters of different varieties, including sponge, chiffon, pound, cupcakes, etc. as per the recipe
- **PC31.** add flavors, colors, and fillings to achieve desired taste profiles for cakes, cupcakes, and other baked confections
- **PC32.** select the toppings and add them on the dough/batter like choco chips, cherries, sprinklers, etc
- **PC33.** pour the batter or place the dough into molds of various shapes and trim or shape it as required to meet the product specifications









- **PC34.** bake the cakes at the correct temperatures and for the appropriate duration as per the recipe
- **PC35.** cool cakes, cupcakes, and other baked goods properly before applying frosting or decoration
- **PC36.** prepare cream fat according to the recipe formulation, incorporating desired flavors for icing, and apply center or sandwich fillings as needed
- **PC37.** decorate using standard techniques such as layering, piping, glazing, and applying various toppings as per product requirements

Producing cookies, rusk, and puff pastries

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

- **PC38.** prepare dough for cookies, puff pastries, and rusk, shaping them as per product specifications
- **PC39.** add ingredients such as nuts, chocolate chips, dried fruits, or other mix-ins as required.
- **PC40.** bake cookies, puff pastries, and rusks at optimal temperatures to achieve the desired texture, such as crispiness or flakiness.
- **PC41.** prepare and bake rusk using double-baking techniques, and monitor the texture and flavor of additional baked items like croissants and puff pastries

Packaging baked products

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

- **PC42.** select and load appropriate packaging materials onto machines or arrange them for manual packaging based on the product type
- **PC43.** transfer baked products safely for packaging, ensuring they are placed properly to prevent damage
- **PC44.** monitor the wrapping and labeling process to ensure compliance with specifications and FSSAI packaging and labeling standards
- **PC45.** record product details such as name, batch number, time of packing, manufacturing and expiry dates, label details, and packaging materials (primary and secondary) using manual or ERP systems
- **PC46.** pack cakes, pastries, pies, tarts, and other baked goods hygienically to maintain freshness and quality
- **PC47.** store packaged and reusable by-products under optimal environmental conditions to preserve their quality and shelf life

Displaying artisanal baked products

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

- **PC48.** arrange and display cakes, pastries, pies, and tarts aesthetically using appropriate trays, cases, or racks to attract maximum attention.
- **PC49.** use suitable service wares to present and store baked products while maintaining hygiene and freshness.
- **PC50.** adjust and monitor storage conditions for displayed baked goods to ensure optimal quality and replenish stock as needed.

Managing finished goods and post-production activities

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

PC51. inspect the quality of finished products before dispatch to ensure they meet required standards.









- **PC52.** record and maintain details of production, including inventory, waste, spoilage, vendor information, customer details, material receipts, and shipment timelines.
- **PC53.** coordinate with vendors for the distribution and supply of baked products to individuals and organizations.
- **PC54.** monitor and manage stocked materials (raw, processed, and finished goods) to ensure quality and quantity align with purchase orders.
- **PC55.** repair minor faults in baking equipment and arrange maintenance when necessary to ensure smooth operations.
- **PC56.** maintain a clean and hygienic workspace, implementing pest control measures and ensuring proper waste disposal as per standard operating procedures.
- **PC57.** clean and sanitize work areas, machinery, equipment, and tools using appropriate cleaning agents and disinfectants

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** methods for measuring and weighing ingredients accurately to maintain recipe consistency
- **KU2.** the different types of flours, sweeteners, leavening agents, and their functional properties in baking
- **KU3.** the importance of sifting and combining dry ingredients for uniformity in texture
- **KU4.** the role of yeast, emulsifiers, and preservatives in baked goods and their correct usage
- **KU5.** the impact of mixing speed, time, and temperature on gluten formation and final product texture
- **KU6.** process and techniques for kneading, folding, and laminating dough to achieve desired consistency
- **KU7.** the types of shaping and molding techniques for various bakery products such as bread, cakes, and pastries
- **KU8.** proofing and fermentation techniques to enhance flavor and texture of artisan breads
- **KU9.** different types of baking equipment, their functions, and maintenance requirements
- **KU10.** correct baking temperatures and times for different products, including breads, cakes, cookies, and pastries
- **KU11.** the importance of even baking and techniques like tray rotation to ensure uniform texture
- **KU12.** methods for assessing doneness of baked goods using visual, touch, and skewer tests
- **KU13.** quality control parameters for evaluating baked products, including texture, color, and aroma
- **KU14.** the scientific principles of starch gelatinization, Maillard reaction, and caramelization in baking
- **KU15.** how to troubleshoot common baking issues such as dense bread, sinking cakes, or overproofed dough
- **KU16.** use of proper cooling techniques to maintain structural integrity and prevent sogginess
- **KU17.** the ingredients and techniques for preparing different types of icings, glazes, and fillings
- **KU18.** methods for decorating cakes and pastries, including piping, layering, and applying toppings
- **KU19.** the double-baking technique for rusk and how it affects texture and shelf life









- **KU20.** methods for packaging bakery products hygienically to extend shelf life and prevent contamination
- KU21. the FSSAI packaging and labeling requirements for artisanal bakery products
- **KU22.** the principles of inventory management for raw materials, finished goods, and reusable byproducts
- **KU23.** the factors affecting the shelf life of baked goods and best storage practices
- **KU24.** the techniques for displaying bakery products aesthetically to attract customers
- **KU25.** the importance of hygiene, cleanliness, and pest control in bakery production areas
- **KU26.** the procedures for maintaining baking equipment and arranging timely maintenance or repairs
- **KU27.** best practices for waste management and sustainable production in bakeries
- **KU28.** the standard operating procedures (SOPs) for handling, storing, and disposing of raw materials
- **KU29.** the regulatory compliance, including food safety norms, hazard analysis, and critical control points (HACCP) in baking
- **KU30.** communication and coordination with vendors for procurement and distribution of baked products
- **KU31.** the documentation practices for recording production details, quality control checks, and inventory tracking
- **KU32.** the customer preferences, market trends, and pricing strategies for artisanal bakery products

Generic Skills (GS)

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

- **GS1.** interpret material requirements from customer interactions and production needs
- **GS2.** read and interpret process flowcharts, manufacturer documents, and equipment manuals effectively
- **GS3.** write in the local language, Hindi, or English effectively for documentation and communication
- **GS4.** communicate effectively with vendors, customers, and team members
- **GS5.** listen attentively and comprehend information given by others
- **GS6.** analyze critical points in day-to-day tasks and identify control measures for issue resolution
- **GS7.** plan and prioritize tasks based on work requirements
- **GS8.** address issues promptly and effectively
- **GS9.** apply domain knowledge and skills effectively in job-related tasks
- **GS10.** manage a team and segregate work efficiently for better outcomes









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Measuring and mixing ingredients	4	7	-	2.5
PC1. plan the baking process by selecting appropriate recipes and required ingredients	0.5	1	-	0.5
PC2. weigh and measure dry and wet ingredients as per recipe specifications	0.5	0.5	-	-
PC3. sift and combine dry ingredients such as flour, baking powder, baking soda, cocoa, starch powder etc.	0.5	1	-	0.5
PC4. add yeast to the mix depending on the product to be produced	0.5	0.5	-	0.5
PC5. check the quantity of the mixture and transfer it into the mixer appropriately	0.5	1	-	0.5
PC6. gradually mix dry ingredients into wet ingredients to prevent gluten formation	0.5	1	-	-
PC7. monitor mixing parameters such as speed, time, and temperature	0.5	1	-	0.5
PC8. store prepared mixes safely in designated areas	0.5	1	-	-
Shaping and molding	2	3	-	1.5
PC9. prepare and knead the mixture (dough or batter) to achieve the required consistency based on the product type, including bread, pastries, cookies, and cakes	0.5	1	-	0.5
PC10. select appropriate shapes, molds, trays, or shaping tools and pour or mold the mixture into suitable forms according to product specifications for various baked goods, including cakes, cookies, bread, and pastries	0.5	1	-	-
PC11. apply necessary fillings, layers, toppings, or decorations based on the product requirements	0.5	0.5	-	0.5









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. allow shaped products to rest, ferment, proof, or set as needed before baking or final processing	0.5	0.5	-	0.5
Baking process	4	7	-	3
PC13. preheat ovens and set baking parameters based on product requirements	0.5	1	-	0.5
PC14. load baking trays or molds into the oven safely	0.5	0.5	-	-
PC15. monitor baking times and temperatures to achieve optimal texture and flavor	0.5	1	-	0.5
PC16. rotate trays if required to ensure even baking	0.5	1	-	0.5
PC17. remove baked goods and transfer them to a cooling station	0.5	0.5	-	0.5
PC18. inspect the product parameters to ensure desired quality Parameters: texture, flavor, color, odour, height, crumbliness etc.	0.5	1	-	0.5
PC19. 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.	0.5	1	-	-
PC20. handover the samples to the quality lab for testing and final approval Testing: physical, chemical, microbiological, organoleptic, etc.	0.5	1	-	0.5
Producing artisanal breads and buns	5	8	-	4
PC21. add ingredients such as emulsifiers, preservatives, colours and flavours etc. into the premix as per requirements	0.5	1	-	0.5
PC22. prepare and ferment dough using appropriate techniques for various baked goods, such as sourdough, brioche, whole wheat bread, multigrain bread, baguettes, burger buns, dinner rolls, and croissants	0.5	1	-	0.5
PC23. monitor proofing and fermentation times to ensure proper texture and flavor development	0.5	1	-	0.5









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC24. apply appropriate pressure to punch down the risen dough and place it in the loaf pan for the next fermentation cycle and proofing	0.5	1	-	0.5
PC25. inspect the quality of the dough thoroughly and check for undesirable characteristics such as cracking, over fermented, under fermented, water absorption capacity, etc.	0.5	1	-	0.5
PC26. divide the dough into balls of standard sizes, select appropriate molds, and place the dough balls to ensure they acquire the desired shape	0.5	1	-	0.5
PC27. apply scoring, glazing, or toppings as per recipe requirements for different products, including seeded bread, milk buns, and laminated pastries like croissants and Danish pastries	0.5	1	-	0.5
PC28. bake breads (e.g., white bread, rye bread, ciabatta), buns (e.g., hot dog buns, brioche buns), and croissants at controlled temperatures for the required duration.	1	0.5	-	0.5
PC29. cool and store finished products under suitable conditions to maintain freshness and quality.	0.5	0.5	-	-
Producing artisanal cakes—different flavors and varieties	5	8	-	3
PC30. prepare cake batters of different varieties, including sponge, chiffon, pound, cupcakes, etc. as per the recipe	1	1	-	0.5
PC31. add flavors, colors, and fillings to achieve desired taste profiles for cakes, cupcakes, and other baked confections	0.5	1	-	0.5
PC32. select the toppings and add them on the dough/batter like choco chips, cherries, sprinklers, etc.	0.5	1	-	0.5
PC33. pour the batter or place the dough into molds of various shapes and trim or shape it as required to meet the product specifications	0.5	1	-	-
PC34. bake the cakes at the correct temperatures and for the appropriate duration as per the recipe	1	1	-	0.5









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC35. cool cakes, cupcakes, and other baked goods properly before applying frosting or decoration	0.5	1	-	-
PC36. prepare cream fat according to the recipe formulation, incorporating desired flavors for icing, and apply center or sandwich fillings as needed	0.5	1	-	0.5
PC37. decorate using standard techniques such as layering, piping, glazing, and applying various toppings as per product requirements	0.5	1	-	0.5
Producing cookies, rusk, and puff pastries	2	3	-	1.5
PC38. prepare dough for cookies, puff pastries, and rusk, shaping them as per product specifications	0.5	1	-	-
PC39. add ingredients such as nuts, chocolate chips, dried fruits, or other mix-ins as required.	0.5	1	-	0.5
PC40. bake cookies, puff pastries, and rusks at optimal temperatures to achieve the desired texture, such as crispiness or flakiness.	0.5	0.5	-	0.5
PC41. prepare and bake rusk using double-baking techniques, and monitor the texture and flavor of additional baked items like croissants and puff pastries	0.5	0.5	-	0.5
Packaging baked products	3	6	-	1.5
PC42. select and load appropriate packaging materials onto machines or arrange them for manual packaging based on the product type	0.5	1	-	-
PC43. transfer baked products safely for packaging, ensuring they are placed properly to prevent damage	0.5	1	-	0.5
PC44. monitor the wrapping and labeling process to ensure compliance with specifications and FSSAI packaging and labeling standards	0.5	1	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC45. record product details such as name, batch number, time of packing, manufacturing and expiry dates, label details, and packaging materials (primary and secondary) using manual or ERP systems	0.5	1	-	0.5
PC46. pack cakes, pastries, pies, tarts, and other baked goods hygienically to maintain freshness and quality	0.5	1	-	0.5
PC47. store packaged and reusable by-products under optimal environmental conditions to preserve their quality and shelf life	0.5	1	-	-
Displaying artisanal baked products	1	2	-	1
PC48. arrange and display cakes, pastries, pies, and tarts aesthetically using appropriate trays, cases, or racks to attract maximum attention.	0.5	1	-	-
PC49. use suitable service wares to present and store baked products while maintaining hygiene and freshness.	-	0.5	-	0.5
PC50. adjust and monitor storage conditions for displayed baked goods to ensure optimal quality and replenish stock as needed.	0.5	0.5	-	0.5
Managing finished goods and post-production activities	4	6	-	2
PC51. inspect the quality of finished products before dispatch to ensure they meet required standards.	1	1	-	0.5
PC52. record and maintain details of production, including inventory, waste, spoilage, vendor information, customer details, material receipts, and shipment timelines.	0.5	1	-	0.5
PC53. coordinate with vendors for the distribution and supply of baked products to individuals and organizations.	0.5	1	-	-
PC54. monitor and manage stocked materials (raw, processed, and finished goods) to ensure quality and quantity align with purchase orders.	0.5	1	-	0.5









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC55. repair minor faults in baking equipment and arrange maintenance when necessary to ensure smooth operations.	0.5	1	-	-
PC56. maintain a clean and hygienic workspace, implementing pest control measures and ensuring proper waste disposal as per standard operating procedures.	0.5	0.5	-	0.5
PC57. clean and sanitize work areas, machinery, equipment, and tools using appropriate cleaning agents and disinfectants	0.5	0.5	-	-
NOS Total	30	50	-	20









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	6
Version	3.0
Last Reviewed Date	08/05/2025
Next Review Date	08/05/2028
NSQC Clearance Date	08/05/2025









FIC/N9906: Apply food safety guidelines in Food Processing

Description

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

Scope

The scope covers the following:

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

Elements and Performance Criteria

Apply personal hygiene and follow Good Manufacturing practices at workplace

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

- **PC1.** PC1. follow a site relevant documented procedure for Personal Hygiene and Visitor/Contractor rules.
- **PC2.** PC2. follow work instructions at levels of employees inside a food manufacturing site and ensure that the relevant instructions are well communicated and being followed at the fixed timelines.
- **PC3.** PC3. ensure timely participate and carry out the relevant training and awareness sessions on personal hygiene, GMP, and related topics.
- PC4. PC4.ensure timely medical examination from a prescribed and authorized doctor and comply with the guidelines of Schedule IV as described in Food Safety Standard Authority of India (FSSAI) guidelines.
- **PC5.** PC5. fill in data in the daily monitoring checklist related to personal hygiene, food safety, and GMP.
- PC6. follow a site-relevant documented procedure and area-wise work instructions for Good Manufacturing Practices (GMP) to be followed on the site.
 - procedure: Hand washing requirements, Gowning & De gowning protocols, cleaning, and sanitation of employee lockers, follow the protocols as laid down in the different categories of processing areas like Low Risk, High Risk, High Care areas, etc.
- **PC7.** PC7. follow all validated Do's & Don'ts inside a food manufacturing firm.
- **PC8.** PC8. follow man and materials movement throughout the production facility, to restrict unwanted hazards to cross-contaminate the products which are being manufactured in the facility.
- **PC9.** PC9. refer to the process flow charts, HACCP summary plan, and critical process parameters in each and respective areas of the production line.
- **PC10.** PC10. identify the material requirements such as manufacturing equipments, Utensils, and other processing aids, cleaning chemicals, and cleaning work instructions in all the relevant areas of the manufacturing facility. Also, a special focus shall be given to Allergens and their risks. Wherever required, the allergen requirements shall be separately addressed.









- **PC11.** PC11. ensure to properly tag and number all the equipment, machinery, tools, and other processing aids to keep proper traceability of the product being manufactured and handled at the site.
- **PC12.** PC12. follow and implement all training and awareness guidelines in the manufacturing area and regularly participate in training effectiveness for evaluation.
- **PC13.** PC13. participate in audits and address the aspects of Good Manufacturing Procedures, personal hygiene, and food safety.
- **PC14.** PC14. ensure the record keeping and documentation such as Daily Monitoring Sheets, Batch Traceability Records, machine records, product parameters, process control parameters, etc.

Implement food safety practices at the workplace

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

- **PC15.** PC15. maintain updated facilities, equipment, and tool and design requirements to minimize the risks associated with the products being handled at the site.
- **PC16.** PC16. follow the instruction in the raw and packaging materials warehouse and ensure receiving material parameters match all the laid requirements. parameters: Incoming vehicles Visual report, storage, and handling requirements, hazardous and non-hazardous goods, allergens, cross-contamination risks, Quarantine, Accepted & rejected goods, monitoring temperature and humidity, etc.
- **PC17.** PC17. follow FSSAI Schedule IV requirements related to Pest Control, Cleaning, and Sanitation, Utilities, Waste Disposal, Prevention of Cross-Contamination, allergen management, corrective action, preventive actions, food operation control etc.
- **PC18.** PC18. ensure timely check of the critical control points and product parameters.
- **PC19.** PC19. record keeping and documentation such as daily monitoring sheets, cleaning sheets, parameters, etc.
- **PC20.** PC20. report any food safety and GMP issue to the supervisor, if any.

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** importance of personal hygiene, GMP, visitors & contractor's rules. Associated risk in case of deviation from the standard policies and how the requirement is linked with the site's FSSAI License.
- **KU2.** KU2. importance of training and work instruction delivered by the supervisors.
- **KU3.** KU3. importance of filling the records and checklists, formats and how to ensure that the timely and effective completion is achieved.
- **KU4.** KU4. knowledge of trainings and skills required to perform in food processing premises.
- **KU5.** KU5. understand FSSAI Schedule IV requirements of food handlers and PRPs within the processing area
- **KU6.** KU6. importance of timely medical examinations and awareness of communicable diseases
- **KU7.** Understanding of Do's & Don'ts, intellect mindset to understand the visual illustrations
- **KU8.** KU8. understanding about Site Zoning plans.
- **KU9.** KU9. awareness of layout which would help to demarcate the defined movements of RM, PM, FG, and wastes generated during the processing of goods. This one lays a framework to launch Good Manufacturing Practices (GMP) successfully and effectively on site.









- **KU10.** KU10. understand the manufacturing process, product parameters and process control parameters such as CCPs
- **KU11.** KU11. understanding about Hazard Analysis and Critical Control Points (HACCP)
- **KU12.** KU12. understanding about Allergens and their types and controls to monitor effective handling of allergen raw materials on site.
- **KU13.** KU13. basic understanding of traceability and mock recall
- KU14. KU14. awareness about Internal & external Audits
- **KU15.** KU15. understanding for RCA CAPA, cleaning and sanitation
- **KU16.** KU16. awareness about record keeping and data monitoring in various sheets as per organizational requirement

Generic Skills (GS)

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

- **GS1.** GS1. read and comprehend basic content to read labels, charts, signages, symbols and product manuals
- **GS2.** GS2. communicate with coworkers appropriately to clarify instructions and other issues
- **GS3.** GS3. plan and organize the work schedule, work area, tools, equipment, and materials for improved productivity
- **GS4.** GS4. plan and prioritize tasks as per work requirements
- **GS5.** GS5. always be punctual and courteous
- **GS6.** GS6. good observations and intellect mindset









Assessment Criteria

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









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









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









National Occupational Standards (NOS) Parameters

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









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









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









- **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









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Follow preventive measures to avoid accidents	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.	_	_	-	-
Deal with emergencies	8	18	-	-
PC10. follow workplace emergency and evacuation procedures	-	-	-	-
PC11. use safe methods to free a person from electrocution	-	-	-	-









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.	-	-	-	-
Manage infection control	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	-	-	-	-









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	-	-









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	08/05/2025
Next Review Date	08/05/2028
NSQC Clearance Date	08/05/2025









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

Description

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

Scope

The scope covers the following:

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

Elements and Performance Criteria

Introduction to Employability Skills

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

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

Constitutional values - Citizenship

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

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

Becoming a Professional in the 21st Century

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

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

Basic English Skills

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

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

Communication Skills

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

PC5. follow good manners while communicating with others

PC6. work with others in a team









Diversity & Inclusion

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

PC7. communicate and behave appropriately with all genders and PwD

PC8. report any issues related to sexual harassment

Financial and Legal Literacy

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

PC9. use various financial products and services safely and securely

PC10. calculate income, expenses, savings etc.

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

Essential Digital Skills

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

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

PC13. use internet and social media platforms securely and safely

Entrepreneurship

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

PC14. identify and assess opportunities for potential business

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

Customer Service

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

PC16. identify different types of customers

PC17. identify customer needs and address them appropriately

PC18. follow appropriate hygiene and grooming standards

Getting ready for apprenticeship & Jobs

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

PC19. create a basic biodata

PC20. search for suitable jobs and apply

PC21. identify and register apprenticeship opportunities as per requirement

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. need for employability skills

KU2. various constitutional and personal values

KU3. different environmentally sustainable practices and their importance

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

KU5. how to use basic spoken English language

KU6. Do and dont of effective communication

KU7. inclusivity and its importance

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

KU9. different types of financial products and services









- **KU10.** how to compute income and expenses
- **KU11.** importance of maintaining safety and security in financial transactions
- **KU12.** different legal rights and laws
- **KU13.** how to operate digital devices and applications safely and securely
- KU14. ways to identify business opportunities
- **KU15.** types of customers and their needs
- **KU16.** how to apply for a job and prepare for an interview
- **KU17.** apprenticeship scheme and the process of registering on apprenticeship portal

Generic Skills (GS)

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

- **GS1.** communicate effectively using appropriate language
- GS2. behave politely and appropriately with all
- **GS3.** perform basic calculations
- **GS4.** solve problems effectively
- **GS5.** be careful and attentive at work
- **GS6.** use time effectively
- **GS7.** maintain hygiene and sanitisation to avoid infection









Assessment Criteria

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









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









National Occupational Standards (NOS) Parameters

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

Assessment Guidelines and Assessment Weightage

Assessment Guidelines

- 1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Element/ Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each Element/ PC.
- 2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
- 3. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/option NOS/set of NOS.
- 4. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below).
- 5. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training center based on these criteria.
- 6. To pass the Qualification Pack assessment, every trainee should score the Recommended Pass % aggregate for the QP.
- 7. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack.









Minimum Aggregate Passing % at QP Level: 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/N9905.Establish facilities for artisanal food production	30	50	-	20	100	20
FIC/N5002.Prepare for production of baked products in artisan bakeries and patisseries	30	50	-	20	100	20
FIC/N5007.Produce baked products in artisan bakeries and patisseries	30	50	-	20	100	30
FIC/N9906.Apply food safety guidelines in Food Processing	30	60	-	10	100	10
FIC/N9903.Ensure workplace health and safety	30	70	-	-	100	10
DGT/VSQ/N0101.Employability Skills (30 Hours)	20	30	-	-	50	10
Total	170	310	-	70	550	100









Acronyms

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training
NCVET	National Council for Vocational Education and Training
NVEQF	National Vocational Educational Qualification Framework
FICSI	·
	Food Industry Capacity & Skill Initiative
QP	Qualification Pack
MC	Model Curriculum
NSQF	National Skills Qualification Framework
NSQC	National Skills Qualification Committee
NOS	National Occupational Standards
NCO	National Classification of Occupations
ES	Employability Skills
НАССР	Hazard Analysis and Critical Control Points
FSSAI	Food Safety and Standards Authority of India
GMPs	Good Manufacturing Practices
GHP	Good Hygiene Practices
PPE	Personal Protective Equipment
SOP	Standard Operating Procedure
СОР	Clean Out of Place
CIP	Clean In Place
CCPs	Critical Control Points
QC	Quality Control
ERP	Enterprise Resource Planning









Glossary

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









Knowledge and Understanding (KU)	Knowledge and Understanding (KU) are statements which together specify the technical, generic, professional and organisational specific knowledge that an individual needs in order to perform to the required standard.
Organisational Context	Organisational context includes the way the organisation is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
Technical Knowledge	Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
Core Skills/ Generic Skills (GS)	Core skills or Generic Skills (GS) are a group of skills that are the key to learning and working in today's world. These skills are typically needed in any work environment in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles.
Electives	Electives are NOS/set of NOS that are identified by the sector as contributive to specialization in a job role. There may be multiple electives within a QP for each specialized job role. Trainees must select at least one elective for the successful completion of a QP with Electives.
Options	Options are NOS/set of NOS that are identified by the sector as additional skills. There may be multiple options within a QP. It is not mandatory to select any of the options to complete a QP with Options.