

# QUALIFICATIONS PACK - OCCUPATIONAL STANDARDS FOR FOOD PROCESSING

## What are Occupational Standards(OS)?

- OS describe what individuals need to do, know and understand in order to carry out a particular job role or function
- OS are performance standards that individuals must achieve when carrying out functions in the workplace, together with specifications of the underpinning knowledge and understanding



## Contents

1. Introduction and Contacts.....Page 1
2. Qualifications Pack.....Page 2
3. Glossary of Key Terms ..... Page 3
4. OS units.....Page 6
5. Assessment Criteria.....Page 35

## Introduction

### Qualifications Pack – Craft Baker

**SECTOR:** FOOD PROCESSING

**SUB-SECTOR:** BREAD AND BAKERY

**OCCUPATION:** PROCESSING

**REFERENCE ID:** FIC/ Q5002

**ALIGNED TO:** NCO-2004/7412.90

A Craft Baker produces baked products ( breads, puffs, cookies, cakes/ pastries, desserts, specialty baked products, etc.) in artisan bakeries and patisseries.

**Brief Job Description:** A Craft Baker produces baked products ( breads, puffs, cookies, cakes/ pastries, desserts, specialty baked products, etc.) in artisan bakeries and patisseries by measuring raw materials and ingredients, mixing, kneading, fermenting, shaping, and baking in order to achieve the desired quality and quantity of products.

**Personal Attributes:** A Craft Baker must have the ability to plan, organize, prioritize, calculate and handle pressure. S/he must be creative and possess reading, writing and communication skills. In addition, the individual must have stamina to be able to stand for long hours, have personal and professional hygiene and an understanding of food safety standards and requirements.

Job Details

<b>Qualifications Pack Code</b>	<b>FIC/Q5002</b>		
<b>Job Role</b>	<b>Craft Baker</b>		
<b>Credits (NSQF)</b>	<b>TBD</b>	<b>Version number</b>	<b>1.0</b>
<b>Sector</b>	<b>Food Processing</b>	<b>Drafted on</b>	<b>23/06/2015</b>
<b>Sub-sector</b>	<b>Bread and bakery</b>	<b>Last reviewed on</b>	<b>03/07/2015</b>
<b>Occupation</b>	<b>Processing</b>	<b>Next review date</b>	<b>02/07/2016</b>

<b>Job Role</b>	<b>Craft Baker</b>
<b>Role Description</b>	A Craft Baker produces baked products ( breads, puffs, cookies, cakes/ pastries, desserts, specialty baked products, etc.) in artisan bakeries and patisseries.
<b>NSQF level</b>	4
<b>Minimum Educational Qualifications</b>	Class 8
<b>Maximum Educational Qualifications</b>	Not Applicable
<b>Training</b> (Suggested but not mandatory)	<ol style="list-style-type: none"> <li>1. Baking process for all baked process</li> <li>2. Training on food standards for baked products</li> <li>3. Operation and basic maintenance of various baking machineries and equipment (used in an artisan bakery)</li> <li>4. GMP</li> <li>5. HACCP</li> <li>6. QMS</li> <li>7. Computer basics</li> <li>8. Training in food Safety Standards and Regulations (as per FSSAI) (Mandatory)</li> </ol>
<b>Experience</b>	NA
<b>Applicable National Occupational Standards (NOS)</b>	<p><b>Compulsory:</b></p> <ol style="list-style-type: none"> <li>1. <a href="#">FIC/N5005 Prepare and maintain work area and machineries for producing baked products in artisan bakeries and patisseries</a></li> <li>2. <a href="#">FIC/N5006 Prepare for production of baked products in artisan bakeries and patisseries.</a></li> <li>3. <a href="#">FIC/N5007 Produce baked products in artisan bakeries and patisseries.</a></li> <li>4. <a href="#">FIC/N5008 Complete documentation and record keeping related to production of baked products in artisan bakeries and patisseries</a></li> <li>5. <a href="#">FIC/N9001 Food safety, hygiene and sanitation for processing food products</a></li> </ol> <p><b>Optional:</b> Not applicable</p>

<b>Performance Criteria</b>	As described in the relevant OS units
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Keywords /Terms	Description
Sector	Sector is a conglomeration of different business operations having similar businesses and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
Occupation	Occupation is a set of job roles, which perform similar/related set of functions in an industry.
Function	Function is an activity necessary for achieving the key purpose of the sector, occupation, or area of work, which can be carried out by a person or a group of persons. Functions are identified through analysis and form the basis of OS.
Job Role	Job role defines a unique set of functions that together form a unique employment opportunity in an organization.
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 they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria	Performance Criteria are statements that together specify the standard of performance required when carrying out a task.
NOS	NOS are Occupational Standards which apply uniquely in the Indian context.
Qualifications Pack Code	Qualifications Pack Code is a unique reference code that identifies a qualifications pack.
Qualifications Pack	Qualifications Pack comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A Qualifications Pack is assigned a unique qualification 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.
Knowledge and Understanding	Knowledge and Understanding are statements which together specify the technical, generic, professional and organizational specific knowledge that an individual needs in order to perform to the required standard.
Organizational Context	Organizational Context includes the way the organization 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 or Generic Skills	Core Skills or Generic Skills are a group of skills that are key to learning and working 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.

## Acronyms

Keywords /Terms	Description
CIP	Clean In Place
COP	Clean Out Of Place
ERP	Enterprise Resource Planning
FIFO	First In First Out
FEFO	First Expiry First Out
FSSAI	Food Safety and Standards Authority of India
GMP	Good Manufacturing Practices
GHP	Good Hygiene Practices
HACCP	Hazard Analysis and Critical Control Point
NOS	National Occupational Standard
NSQF	National Skill Qualification Framework
NVEQF	National Vocational Educational Qualification Framework
NVQF	National Vocational Qualification Framework
OS	Occupational Standard
PC	Performance Criteria
QP	Qualification Pack
SSC	Sector Skill Council
SOP	Standard Operating Procedure
QMS	Quality Management System

FIC/N5005

Prepare and maintain work area and machineries for producing  
baked products in artisan bakeries and patisseries

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# National Occupational Standard



## Overview

This OS unit is about preparing work area for hygiene and safety, and ensuring performance, efficiency and maintenance of process machineries and tools for producing baked products in artisan bakeries and patisseries, as per the specifications and standards of the organization.

FIC/N5005

**Prepare and maintain work area and machineries for producing baked products in artisan bakeries and patisseries**

National Occupational Standard

<b>Unit Code</b>	<b>FIC/N5005</b>
<b>Unit Title(Task)</b>	<b>Prepare and maintain work area and process machineries for producing baked products in artisan bakeries and patisseries</b>
<b>Description</b>	This unit is about preparing work area for hygiene and safety, and ensuring performance, efficiency and maintenance of process machineries and tools for producing baked products in artisan bakeries and patisseries, as per the specifications and standards of the organization.
<b>Scope</b>	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> <li>• Prepare and maintain work area (for producing baked products in artisan bakeries and patisseries)</li> <li>• Prepare and maintain process machineries and tools (for producing baked products in artisan bakeries and patisseries)</li> </ul>
<b>Performance Criteria(PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Prepare and maintain work area (for producing baked products in artisan bakeries and patisseries)</b>	<p>PC1. clean and maintain the cleanliness of the work area using approved sanitizers and keep it free from dust, waste, flies and pests</p> <p>PC2. ensure that the work area is safe and hygienic for food processing</p> <p>PC3. dispose waste materials as per defined SOP's and industry requirements</p>
<b>Prepare and maintain process machineries and tools (for producing baked products in artisan bakeries and patisseries)</b>	<p>PC4. check the working and performance of all machineries and tools used for production</p> <p>PC5. clean the machineries and tools used with approved sanitizers following specifications and SOPs</p> <p>PC6. place the necessary tools required for the process</p> <p>PC7. attend minor repairs/ faults of machines, if required</p>
<b>Knowledge and Understanding (K)</b>	
<b>A. Organizational Context</b> (Knowledge of the organization and its processes)	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. organization standards, process standards and procedures followed in the organization</p> <p>KA2. types of products produced by the organization</p> <p>KA3. code of business conduct</p> <p>KA4. dress code to be followed</p> <p>KA5. job responsibilities/duties and standard operating procedures</p> <p>KA6. internal processes such as procurement, store management, inventory management, quality management and key contact points for query resolution</p> <p>KA7. provision of wages, working hours as per organization policy</p> <p>KA8. food safety and hygiene standards followed</p>
<b>B. Technical Knowledge</b>	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. types of chemicals, materials and equipment required for cleaning and maintenance</p> <p>KB2. cleaning process to disinfect equipment/ tools</p>

FIC/N5005

**Prepare and maintain work area and machineries for producing baked products in artisan bakeries and patisseries**

	<p>KB3. knowledge on Food Safety Standards and Regulations (as per FSSAI)          KB4. supplier/manufacturers instructions related to cleaning and maintenance          KB5. knowledge on legal regulations pertaining to work place such as health and safety, recommended dosage for use of sanitizers, control of substances hazardous to health, handling/storage/ disposal/ cautions for use of sanitizers and disinfectants, fire precautions/ occurrences, hygiene practice, disposal of waste, environmental protection, etc.</p>
<b>Skills (S) [Optional]</b>	
<p><b>A. Core Skills/ Generic Skills</b></p>	<p><b>Writing Skills</b></p> <p>The user/ individual on the job needs to know and understand how to:</p> <p>SA1. note the information communicated by the supervisor          SA2. note the raw materials used for production and the finished products produced          SA3. note the readings of the process parameters and provide necessary information to fill the process chart          SA4. note down observations (if any) related to the process          SA5. write information documents to internal departments/ internal teams          SA6. note down the data for ERP or as required by the organization</p>
	<p><b>Reading Skills</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA7. read and interpret the process required for producing various types of products          SA8. read and interpret and process flowchart for all products produced          SA9. read equipment manuals and process documents to understand the equipment operation and process requirement          SA10. read internal information documents sent by internal teams</p>
	<p><b>Oral Communication (Listening and Speaking skills)</b></p> <p>The user/individual on the job needs to know and understand how to :</p> <p>SA11. discuss task lists, schedules and activities with the supervisor          SA12. effectively communicate with the team members          SA13. question the supervisor in order to understand the nature of the problem and to clarify queries          SA14. attentively listen and comprehend the information given by the speaker          SA15. communicate clearly with the supervisor and cross department team on the issues faced</p>
	<p><b>B. Professional Skills</b></p> <p><b>Decision Making</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SB1. analyse critical points in day to day tasks through experience and observation and identify control measures to solve the issue          SB2. handle issues in case the supervisor is not available (as per the authority matrix defined by the organization)</p>
	<p><b>Plan and Organize</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SB3. plan and organize the work order and jobs received from the supervisor          SB4. organize raw materials and packaging materials required for all products following the instruction provided by the supervisor</p>



FIC/N5005

**Prepare and maintain work area and machineries for producing baked products in artisan bakeries and patisseries**

	<p>SB5. plan and prioritize the work based on the instructions received from the supervisor</p> <p>SB6. plan to utilise time and equipment's effectively</p> <p>SB7. organize all process/ equipment manuals so as to access information easily</p> <p>SB8. support the supervisor in scheduling tasks for helper(s)</p>
	<p><b>Customer Centricity</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SB9. understand customer requirements and their priority and respond as per their needs</p>
	<p><b>Problem Solving</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SB10. support supervisor in solving problems by detailing out problems</p> <p>SB11. discuss the possible solutions with the supervisor for problem solving</p>
	<p><b>Analytical Thinking</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SB12. apply domain information about maintenance processes and technical knowledge about tools and equipment</p>
	<p><b>Critical Thinking</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SB13. use common sense and make judgments on day to day basis</p> <p>SB14. use reasoning skills to identify and resolve basic problems</p> <p>SB15. use intuition to detect any potential problems which could arise during operations</p> <p>SB16. use acquired knowledge of the process for identifying and handling issues</p>

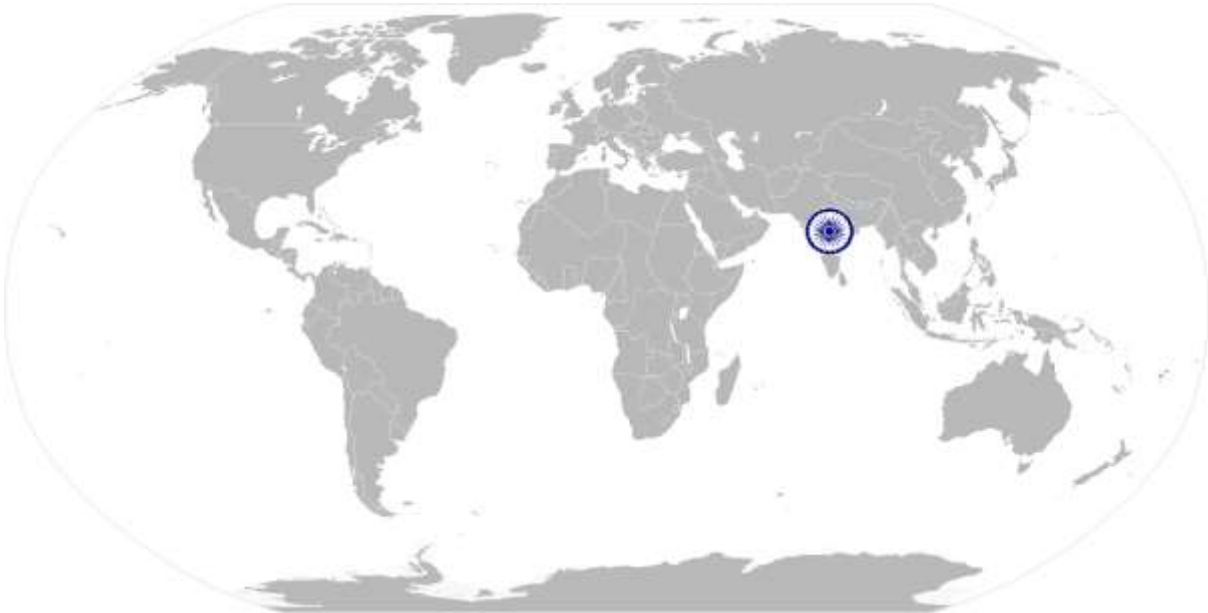
FIC/N5005

Prepare and maintain work area and machineries for producing  
baked products in artisan bakeries and patisseries

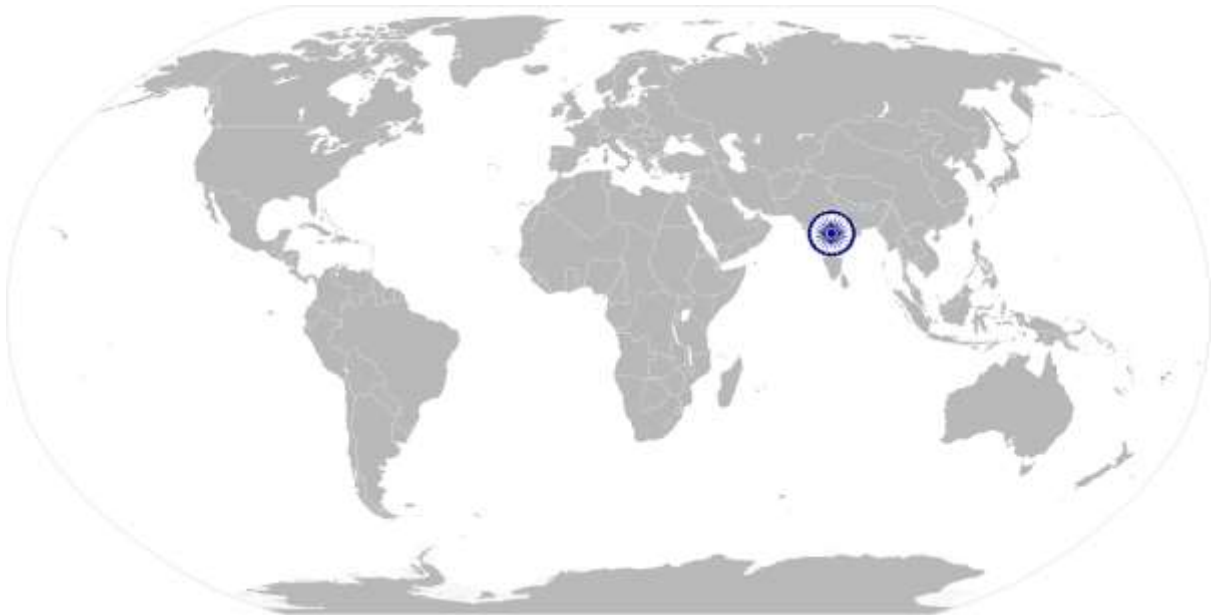
## NOS Version Control

NOS Code	FIC/N5005		
Credits (NSQF)	TBD	Version number	1.0
Industry	Food Processing	Drafted on	23/06/2015
Industry Sub-sector	Bread and bakery	Last reviewed on	03/07/2015
Occupation	Processing	Next review date	02/07/2016

[Back to Top](#)



# National Occupational Standard



## Overview

This OS unit is about preparation of raw materials and machineries for production of various baked products in artisan bakeries and patisseries.

FIC/N5006

**Prepare for production of baked products in artisan bakeries and patisseries**

National Occupational Standard

<b>Unit Code</b>	<b>FIC/N5006</b>
<b>Unit Title(Task)</b>	<b>Prepare for production of baked products in artisan bakeries and patisseries</b>
<b>Description</b>	This unit is about preparation of raw materials and machineries for production of various baked products in artisan bakeries and patisseries.
<b>Scope</b>	<p>The scope of this role will include:</p> <ul style="list-style-type: none"> <li>• Production Planning (for producing baked products in artisan bakeries and patisseries)</li> <li>• Plan equipment utilization and manpower (for producing baked products in artisan bakeries and patisseries)</li> <li>• Prepare for baking (for producing baked products in artisan bakeries and patisseries)</li> </ul>
<b>Performance Criteria(PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Production Planning (for producing baked products in artisan bakeries and patisseries)</b>	<p>PC1. read and understand the production order from the supervisor (or) calculate the type of products and quantity of products to be produced based on sales of the outlet</p> <p>PC2. check the availability of raw materials, packaging materials, equipment and manpower</p> <p>PC3. plan production sequence by:</p> <ul style="list-style-type: none"> <li>• grouping products which are of the same type (fermented/unfermented products)</li> <li>• selecting raw materials that do not impact the quality of the other</li> <li>• using the same equipment and machinery for various products</li> <li>• planning maximum capacity utilization of machineries</li> <li>• considering the process time for each product</li> <li>• planning efficient utilization of resources/manpower</li> <li>• prioritizing urgent orders</li> </ul> <p>PC4. calculate the batch size based on the production order and machine capacity</p> <p>PC5. calculate the raw material requirement (considering the process loss) to produce the required quantity of finished product(s)</p> <p>PC6. calculate the raw materials (including ingredients, if any), packaging materials and manpower requirement for the completing the order</p>
<b>Plan equipment utilization and manpower (for producing baked products in artisan bakeries and patisseries)</b>	<p>PC7. check the working and performance of equipment required for the baking process</p> <p>PC8. calculate the lead time from mixing to oven loading for effective utilization of baking equipments</p> <p>PC9. plan batch size considering full capacity utilization of equipments</p> <p>PC10. plan to utilize equipments for multiple products without affecting the quality of the finished products, and to optimize production and save energy</p> <p>PC11. allot responsibilities/ work to the assistants and helpers</p>

FIC/N5006

**Prepare for production of baked products in artisan bakeries and patisseries**

<p><b>Prepare for Baking (for producing baked products in artisan bakeries and patisseries)</b></p>	<p>PC12. refer to the process chart/ product flow chart/formulation chart for product(s) produced</p> <p>PC13. check the conformance of raw material quality to organization standards through physical parameters such as appearance, colour, texture, etc.</p> <p>PC14. weigh the raw materials required for the batch (including ingredients, additives, preservatives, etc.) accurately, considering that exact quantity of ingredients and additives are responsible for final yield and quality of the finished products</p> <p>PC15. start machine and check its working and performance, make minor adjustments or repairs (if required)</p> <p>PC16. keep tools accessible to attend repairs/faults in case of breakdown</p>
<p><b>Knowledge and Understanding (K)</b></p>	
<p><b>B. Organizational Context</b> (Knowledge of the organization and its processes)</p>	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. organization standards, process standards and procedures followed in the organization</p> <p>KA2. types of products produced by the organization</p> <p>KA3. code of business conduct</p> <p>KA4. dress code to be followed</p> <p>KA5. job responsibilities/duties and standard operating procedures</p> <p>KA6. internal processes such as procurement, store management, inventory management, quality management and key contact points for query resolution</p> <p>KA7. provision of wages, working hours as per organization policy</p> <p>KA8. food safety and hygiene standards followed</p>
<p><b>B. Technical Knowledge</b></p>	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. types of raw materials (including ingredients) and various baked products</p> <p>KB2. methods for baking various types of baked product</p> <p>KB3. types of machineries used for baking various products and machineries</p> <p>KB4. basic maintenance of baking equipments</p> <p>KB5. supplier/manufacturers instructions related to machineries</p> <p>KB6. basic mathematics</p> <p>KB7. calculation of raw material for required quantity of finished product</p> <p>KB8. quality parameters and quality assessment based on physical parameters</p> <p>KB9. food safety and hygiene</p> <p>KB10. knowledge on Food Safety Standards and Regulations (as per FSSAI)</p> <p>KB11. GMP</p> <p>KB12. HACCP</p>
<p><b>Skills (S)</b></p>	
<p><b>Core Skills/ Generic</b></p>	<p><b>Writing Skills</b></p>

FIC/N5006

**Prepare for production of baked products in artisan bakeries and  
patisseries**

<b>Skills</b>	The user/ individual on the job needs to know and understand how to: SA1. note the information communicated by the supervisor SA2. note the raw materials used for production and the finished products produced SA3. note the readings of the process parameters and provide necessary information to fill the process chart SA4. note down observations (if any) related to the process SA5. write information documents to internal departments/ internal teams SA6. note down the data for ERP or as required by the organization
	<b>Reading Skills</b>
	The user/individual on the job needs to know and understand how to: SA7. read and interpret the process required for producing various types of products SA8. read and interpret and process flowchart for all products produced SA9. read equipment manuals and process documents to understand the equipment operation and process requirement SA10. read internal information documents sent by internal teams
	<b>Oral Communication (Listening and Speaking skills)</b>
	The user/individual on the job needs to know and understand how to : SA11. discuss task lists, schedules and activities with the supervisor SA12. effectively communicate with the team members SA13. question the supervisor in order to understand the nature of the problem and to clarify queries SA14. attentively listen and comprehend the information given by the speaker SA15. communicate clearly with the supervisor and cross department team on the issues faced
<b>B. Professional Skills</b>	<b>Decision Making</b>
	The user/individual on the job needs to know and understand how to: SB1. analyse critical points in day to day tasks through experience and observation and identify control measures to solve the issue SB2. handle issues in case the supervisor is not available (as per the authority matrix defined by the organization)
	<b>Plan and Organize</b>
	The user/individual on the job needs to know and understand how to: SB3. plan and organize the work order and jobs received from the supervisor SB4. organize raw materials and packaging materials required for all products following the instruction provided by the supervisor SB5. plan and prioritize the work based on the instructions received from the supervisor SB6. plan to utilise time and equipment's effectively SB7. organize all process/ equipment manuals so as to access information easily SB8. support the supervisor in scheduling tasks for helper(s)
	<b>Customer Centricity</b>
The user/individual on the job needs to know and understand how to: SB9. understand customer requirements and their priority and respond as per their needs	
<b>Problem Solving</b>	

FIC/N5006

**Prepare for production of baked products in artisan bakeries and  
patisseries**

	SB10. support supervisor in solving problems by detailing out problems SB11. discuss the possible solutions with the supervisor for problem solving
	<b>Analytical Thinking</b>
	The user/individual on the job needs to know and understand how to: SB12. apply domain information about maintenance processes and technical knowledge about tools and equipment
	<b>Critical Thinking</b>
	The user/individual on the job needs to know and understand how to: SB13. use common sense and make judgments on day to day basis SB14. use reasoning skills to identify and resolve basic problems SB15. use intuition to detect any potential problems which could arise during operations SB16. use acquired knowledge of the process for identifying and handling issues



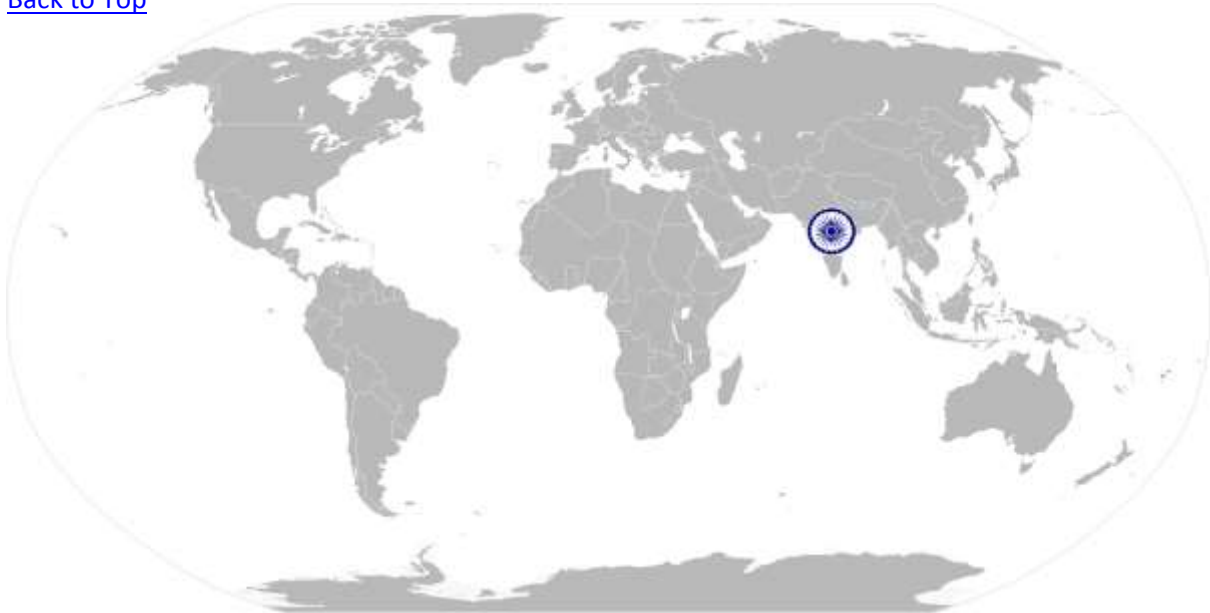
FIC/N5006

Prepare for production of baked products in artisan bakeries and  
patisseries

## NOS Version Control

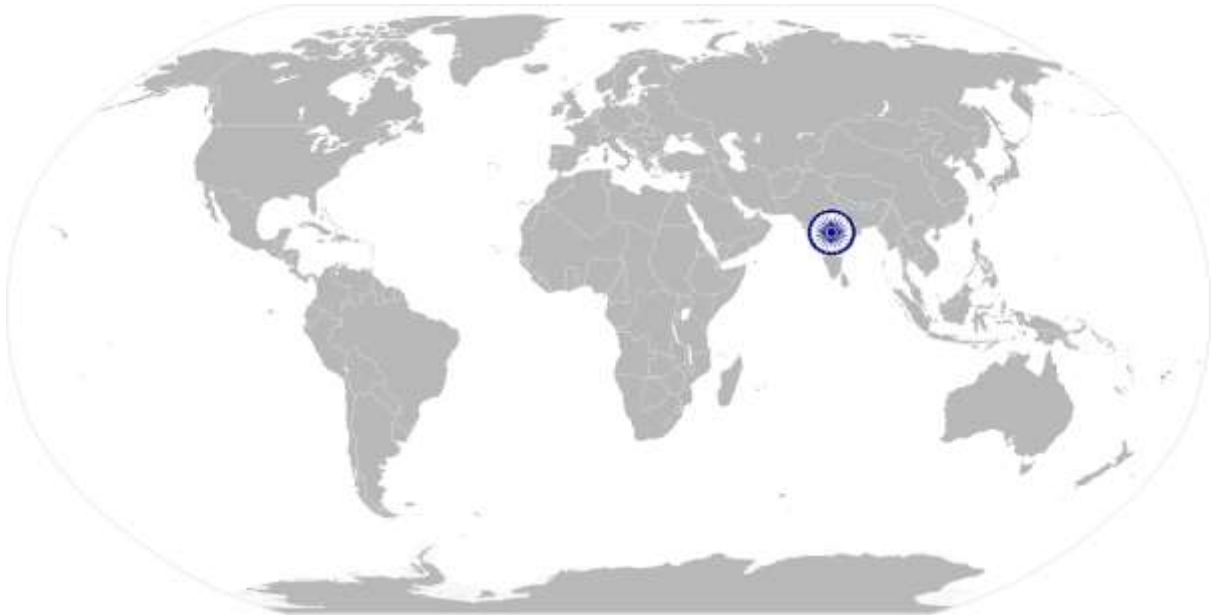
<b>NOS Code</b>	<b>FIC/N5006</b>		
<b>Credits (NSQF)</b>	<b>TBD</b>	<b>Version number</b>	<b>1.0</b>
<b>Industry</b>	<b>Food Processing</b>	<b>Drafted on</b>	<b>23/06/2015</b>
<b>Industry Sub-sector</b>	<b>Bread and bakery</b>	<b>Last reviewed on</b>	<b>03/07/2015</b>
<b>Occupation</b>	<b>Processing</b>	<b>Next review date</b>	<b>02/07/2016</b>

[Back to Top](#)





# National Occupational Standard



## Overview

This OS unit is about producing various baked products using required equipments and acquired skills as per the defined SOPs, in artisan bakeries and patisseries.

**FIC/N5007**

**Produce baked products in artisan bakeries and patisseries**

<b>Unit Code</b>	<b>FIC/N5007</b>
<b>Unit Title(Task)</b>	<b>Produce baked products in artisan bakeries and patisseries.</b>
<b>Description</b>	This OS unit is about producing various baked products using required equipments and acquired skills as per the defined SOPs, in artisan bakeries and patisseries.
<b>Scope</b>	<p>The scope of this role will include:</p> <ul style="list-style-type: none"> <li>• Mix ingredients</li> <li>• Fermentation and proofing dough</li> <li>• Roll, shape, cut and mould</li> <li>• Bake products</li> <li>• Design and develop speciality baked products</li> <li>• Post production cleaning and regular maintenance of equipments</li> </ul>
<b>Performance Criteria(PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Mix ingredients</b>	<p>PC1. check the quality of ingredients through physical parameters such as appearance, colour, odour, texture, etc. for its conformance to organization standards</p> <p>PC2. weigh and accurately measure all ingredients as per formulation and transfer the weighed raw materials to the working bench/ mixing table</p> <p>PC3. cream the shortenings till they reach the required consistency</p> <p>PC4. knead/mix the ingredient to prepare dough/batter of required consistency</p> <p>PC5. check the quality of the dough/batter for its conformance to the defined SOPs</p>
<b>Fermentation and proofing dough</b>	<p>PC6. transfer the dough into a container and allow it to stand for specified time for fermentation and periodically check the consistency and texture to determine the level of fermentation</p> <p>PC7. dust the table with flour and transfer the dough from the container to the table dusted with flour</p> <p>PC8. stretch and fold the fermented dough for degassing, brush the dough surface to remove excess flour and transfer dough back to the dough container for continued fermentation</p> <p>PC9. repeat stretch and fold four to five times to obtain desired consistency</p> <p>PC10. cut the dough and weigh the quantity required for making the product and mould dough into loaves or form to desired shape</p> <p>PC11. sprinkle topping such as spices, cereals, seeds, etc. for making special rolls or breads and place the loaves or shaped dough in the bread box/mould or baking pans</p> <p>PC12. check the water level in the proof box and set to the required time, temperature and humidity and load the proof box with the bread box/mould filled with dough, following production sequence</p> <p>PC13. monitor proof box parameters such as temperature/humidity during proofing process, monitor raising of dough in the proof box and remove the bread mould out of proof box after dough has rise to specified height</p>
<b>Roll, shape, cut and mould</b>	<p>PC14. sprinkle flour on dough and work bench to prevent dough from sticking, and roll dough to desired thickness with rolling pin to make cookies and biscuits</p> <p>PC15. cut the dough to desired shape using cookie cutter, spread or sprinkle</p>

FIC/N5007

Produce baked products in artisan bakeries and patisseries

	<p>toppings on the shaped dough</p> <p>PC16. grease or flour the baking pans and place the shaped dough in it</p> <p>PC17. pour the measured quantity of batter( cake batter) into the moulds of various shape</p>
<p><b>Bake products</b></p>	<p>PC18. start the oven and set the temperature for preheating</p> <p>PC19. set the oven temperature and baking time for the product referring to the process parameter chart, load the filled baking pans in the oven and observe spacing between the pans</p> <p>PC20. monitor oven parameters such as temperature and time during baking process</p> <p>PC21. observe colour of baking product to detect over baking and to achieve finished product of uniform quality</p> <p>PC22. unload the baked products from the oven and check the quality of the product through physical parameters such as colour, size, appearance, texture, aroma, etc. and ensure that the product meets the required standards</p> <p>PC23. unload the pans/trays immediately after removing from the oven and place baked product on the cooling racks for cooling, and stack the emptied baking pans in the designated area</p> <p>PC24. adjust or reset controls to load the next batch/ product in the oven</p> <p>PC25. weigh the baked product to check the yield (from raw material to finished product)</p> <p>PC26. slice, pack, label and store the product following the product requirement / defined SOP's</p> <p>PC27. report discrepancies/concerns in each stage of production to department supervisor for immediate action</p>
<p><b>Design and develop specialty bakery products</b></p>	<p>PC28. create designs based on concepts of colour, shape, texture, pattern, form, etc. or check designs from production order for developing specialty bakery products such as wedding cakes, celebration cakes, etc.</p> <p>PC29. organize tools and equipments required for filling, trimming, masking, covering, decoration and storage of specialty bakery products</p> <p>PC30. check the quality of finishing materials such as icings, fondants, glazes, chocolate, fruits, grains , nuts, etc. required for preparation of specialty bakery products</p> <p>PC31. cut and shape the cake for decoration</p> <p>PC32. prepare icings, fondants, colours, fruits, etc. required according to the design</p> <p>PC33. apply glazes, icings, or other toppings to baked goods using spatulas, brushes, piping bags, etc.</p> <p>PC34. check the decorated product for its conformance to customer order or organization standards</p> <p>PC35. check and maintain cleanliness and required storage conditions for the product</p> <p>PC36. set and maintain temperature of the refrigeration system for storage of finished product</p> <p>PC37. store the specialty bakery products following the product requirement and defined SOPs</p>
<p><b>Post production cleaning and regular maintenance of equipments</b></p>	<p>PC38. clean the work area, machineries, equipment and tools using recommended cleaning agents and sanitizers</p> <p>PC39. attend minor repairs/faults of all machines (if any)</p> <p>PC40. ensure periodic (daily/weekly/monthly/quarterly/half yearly/annual)</p>

FIC/N5007

**Produce baked products in artisan bakeries and patisseries**

	<p>maintenance of all machines and equipment following the SOP or following suppliers instructions/manuals</p>
<p><b>Knowledge and Understanding (K)</b></p>	
<p><b>C. Organizational Context</b> (Knowledge of the organization and its processes)</p>	<p>The user/individual on the job needs to know and understand:</p> <ul style="list-style-type: none"> <li>KA1. organization standards, process standards and procedures followed in the organization</li> <li>KA2. types of products produced by the organization</li> <li>KA3. code of business conduct</li> <li>KA4. dress code to be followed</li> <li>KA5. job responsibilities/duties and standard operating procedures</li> <li>KA6. internal processes such as procurement, store management, inventory management, quality management and key contact points for query resolution</li> <li>KA7. provision of wages, working hours as per organization policy</li> <li>KA8. food safety and hygiene standards followed</li> </ul>
<p><b>B. Technical Knowledge</b></p>	<p>The user/individual on the job needs to know and understand:</p> <ul style="list-style-type: none"> <li>KB1. types of raw materials, ingredients and finishing materials required for making various baked products</li> <li>KB2. production process, process parameters and formulation for all types of various baked products</li> <li>KB3. types of machineries used for baking various products and machineries used in the organization</li> <li>KB4. handling and maintenance of baking equipments</li> <li>KB5. hand in machine safety</li> <li>KB6. process parameters and machine parameters for all products handled</li> <li>KB7. basic mathematics</li> <li>KB8. quality parameters, quality standards to be maintained and quality assessment based on physical parameters</li> <li>KB9. types of packaging materials for various type of products</li> <li>KB10. types of chemicals, materials, tools and equipment required for cleaning and maintenance</li> <li>KB11. clean-in-place and clean-out-of-place methods and procedures</li> <li>KB12. methods to clean and disinfect equipments, tools and work area</li> <li>KB13. food safety and hygiene</li> <li>KB14. knowledge on Food Safety Standards and Regulations (as per FSSAI)</li> <li>KB15. GMP</li> <li>KB16. HACCP</li> </ul>
<p><b>Skills (S)</b></p>	
<p><b>B. Core Skills/ Generic Skills</b></p>	<p><b>Writing Skills</b></p>
	<p>The user/ individual on the job needs to know and understand how to:</p> <ul style="list-style-type: none"> <li>SA1. note the information communicated by the supervisor</li> <li>SA2. note the raw materials used for production and the finished products produced</li> <li>SA3. note the readings of the process parameters and provide necessary information to fill the process chart</li> <li>SA4. note down observations (if any) related to the process</li> <li>SA5. Write information documents to internal departments/ internal teams</li> <li>SA6. Note down the data for ERP or as required by the organization</li> </ul>

FIC/N5007

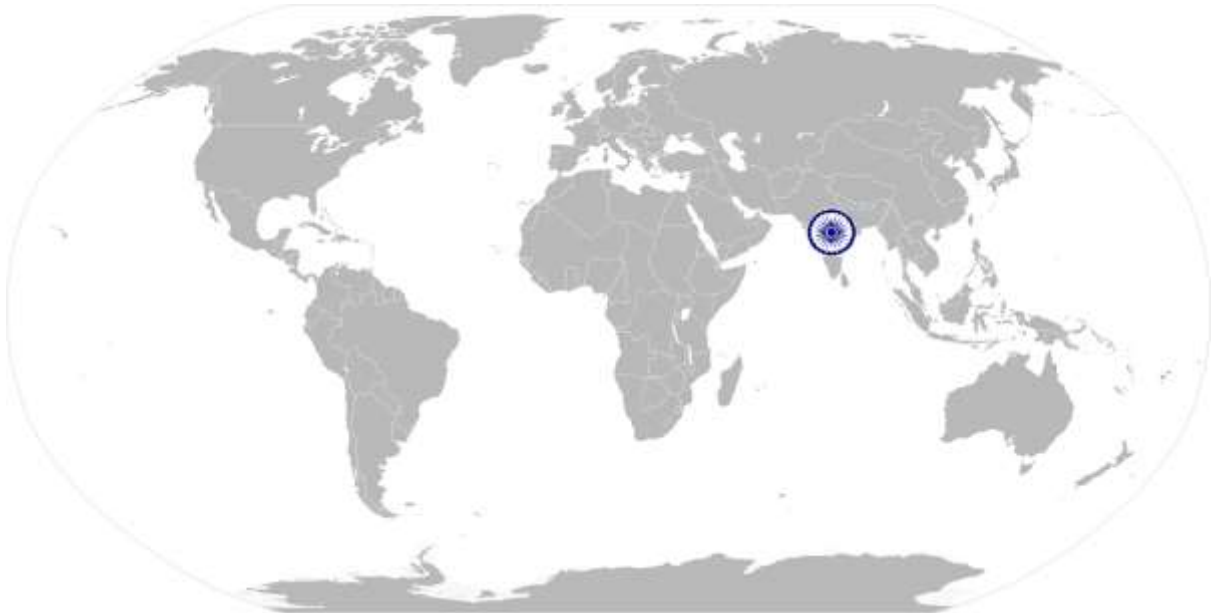
**Produce baked products in artisan bakeries and patisseries**

	<b>Reading Skills</b>
	The user/individual on the job needs to know and understand how to: SA7. read and interpret the process required for producing various types of products SA8. read and interpret and process flowchart for all products produced SA9. read equipment manuals and process documents to understand the equipment operation and process requirement SA10. read internal information documents sent by internal teams
	<b>Oral Communication (Listening and Speaking skills)</b>
	The user/individual on the job needs to know and understand how to : SA11. discuss task lists, schedules and activities with the supervisor SA12. effectively communicate with the team members SA13. question the supervisor in order to understand the nature of the problem and to clarify queries SA14. attentively listen and comprehend the information given by the speaker SA15. communicate clearly with the supervisor and cross department team on the issues faced
<b>B. Professional Skills</b>	<b>Decision Making</b>
	The user/individual on the job needs to know and understand how to: SB1. analyse critical points in day to day tasks through experience and observation and identify control measures to solve the issue SB2. handle issues in case the supervisor is not available (as per the authority matrix defined by the organization)
	<b>Plan and Organize</b>
	The user/individual on the job needs to know and understand how to: SB3. plan and organize the work order and jobs received from the supervisor SB4. organize raw materials and packaging materials required for all products following the instruction provided by the supervisor SB5. plan and prioritize the work based on the instructions received from the supervisor SB6. plan to utilise time and equipment's effectively SB7. organize all process/ equipment manuals so as to access information easily SB8. support the supervisor in scheduling tasks for helper(s)
	<b>Customer Centricity</b>
	The user/individual on the job needs to know and understand how to: SB9. understand customer requirements and their priority and respond as per their needs
	<b>Problem Solving</b>
	The user/individual on the job needs to know and understand how to: SB10. support supervisor in solving problems by detailing out problems SB11. discuss the possible solutions with the supervisor for problem solving
	<b>Analytical Thinking</b>
	The user/individual on the job needs to know and understand how to: SB12. apply domain information about maintenance processes and technical knowledge about tools and equipment
<b>Critical Thinking</b>	
The user/individual on the job needs to know and understand how to: SB13. use common sense and make judgments on day to day basis SB14. use reasoning skills to identify and resolve basic problems	

FIC/N5007

**Produce baked products in artisan bakeries and patisseries**

	<p>SB15. use intuition to detect any potential problems which could arise during operations</p> <p>SB16. use acquired knowledge of the process for identifying and handling issues</p>
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FIC/N5007

Produce baked products in artisan bakeries and patisseries

## NOS Version Control

NOS Code	FIC/N5007		
Credits (NSQF)	TBD	Version number	1.0
Industry	Food Processing	Drafted on	23/06/2015
Industry Sub-sector	Bread and bakery	Last reviewed on	03/07/2015
Occupation	Processing	Next review date	02/07/2016

[Back to Top](#)

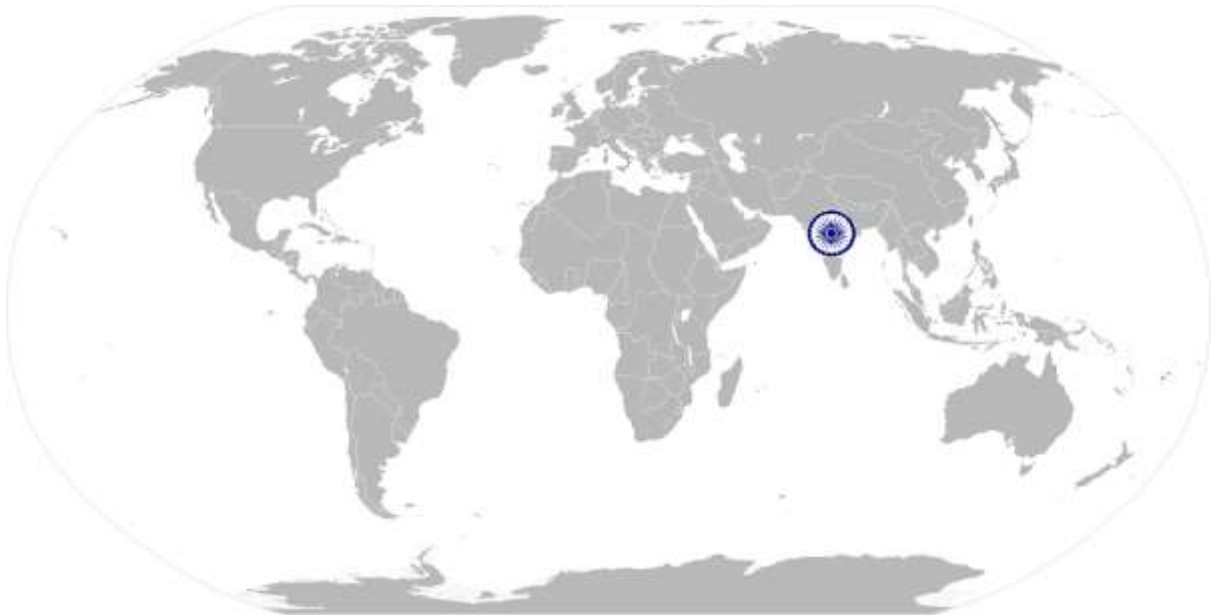


FIC/N5008

Complete documentation and record keeping related to production of baked products in artisan bakeries and patisseries.

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# National Occupational Standard



## Overview

This OS unit is about documenting and maintaining records of raw materials, process and finished products related to production of baked products in artisan bakeries and patisseries.



FIC/N5008

**Complete documentation and record keeping related to production of baked products in artisan bakeries and patisseries.**

National Occupational Standard

<b>Unit Code</b>	<b>FIC/N5008</b>
<b>Unit Title(Task)</b>	<b>Complete documentation and record keeping related to production of baked products in artisan bakeries and patisseries.</b>
<b>Description</b>	This unit is about documenting and maintaining records of raw materials, process and finished products, related to production of baked products in artisan bakeries and patisseries.
<b>Scope</b>	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> <li>• Document and maintain records of raw materials (related to production of baked products in artisan bakeries and patisseries)</li> <li>• Document and maintain record of production schedule and process parameters (related to production of baked products in artisan bakeries and patisseries)</li> <li>• Document and maintain record of finished products (related to production of baked products in artisan bakeries and patisseries)</li> </ul>
<b>Performance Criteria(PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Document and maintain record of raw materials (related to production of baked products in artisan bakeries and patisseries)</b>	<p>PC1. document and maintain record of details of all raw materials used such as names of raw materials, supplier details, receiving date/ date of manufacture, expiry date, supplier quality document, quality parameters for all raw materials, internal quality analysis report, etc., as per organization standards</p> <p>PC2. maintain record of observations (if any) related to raw materials and packaging materials</p> <p>PC3. load the raw material details in computer or in the ERP system followed by the organization for future reference</p> <p>PC4. verify the documents and track from finished product to raw materials, in case of quality concerns and during quality management system audits</p>
<b>Document and maintain record of production schedule and process parameters (related to production of baked products in artisan bakeries and patisseries)</b>	<p>PC5. document and maintain records of production details such as the product produced, production sequence, equipment and machinery details, efficiency and capacity utilization of equipment, etc.</p> <p>PC6. document and maintain records of process details such as type of raw material used, process parameters (temperature, time etc. as applicable) for the entire process in process chart or production log for all products produced</p> <p>PC7. document and maintain record of batch size, raw material used, yield after each stage of process, wastage, energy utilization and final products produced</p> <p>PC8. maintain record of observations or deviations (if any) related to production and process parameters</p> <p>PC9. load the production and process parameter details in computer or in the ERP system followed by the organization for future reference</p> <p>PC10. verify documents and track them from finished product to raw materials, in case of quality concerns, and during quality management system audits</p>

FIC/N5008

**Complete documentation and record keeping related to production of baked products in artisan bakeries and patisseries.**

<p><b>Document and maintain records of the finished products (related to production of baked products in artisan bakeries and patisseries.)</b></p>	<p>PC11. document and maintain records 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., as per organization standards</p> <p>PC12. maintain record of observations or deviations (if any) related to finished products</p> <p>PC13. load the finished product details in computer or in the ERP system followed by the organization for future reference</p> <p>PC14. verify the documents and track them from finished product to raw materials, in case of quality concerns, and during quality management system audits</p>
<p><b>Knowledge and Understanding (K)</b></p>	
<p><b>D. Organizational Context</b> (Knowledge of the organization and its processes)</p>	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. organization standards, process standards and procedures followed in the organization</p> <p>KA2. types of products produced by the organization</p> <p>KA3. code of business conduct</p> <p>KA4. dress code to be followed</p> <p>KA5. job responsibilities/duties and standard operating procedures</p> <p>KA6. internal processes such as procurement, store management, inventory management, quality management and key contact points for query resolution</p> <p>KA7. provision of wages, working hours as per organization policy</p> <p>KA8. food safety and hygiene standards followed</p>
<p><b>B. Technical Knowledge</b></p>	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. documentation system followed in the organization such as production chart, process chart and finished goods chart</p> <p>KB2. details to be recorded on raw materials and dough prepared</p> <p>KB3. details to be recorded and maintained on production sequence and process parameters</p> <p>KB4. methods to record and maintain record of observations (if any) related to raw materials, process and finished products</p> <p>KB5. method to track back the record from prepared dough to raw material</p> <p>KB6. basic computer knowledge</p> <p>KB7. knowledge on Food Safety Standards and Regulations (as per FSSAI)</p> <p>KB8. enter details in ERP system followed by the organization</p>
<p><b>Skills (S)</b></p>	
<p><b>C. Core Skills/ Generic Skills</b></p>	<p><b>Writing Skills</b></p> <p>The user/ individual on the job needs to know and understand how to:</p> <p>SA1. note the information communicated by the supervisor</p> <p>SA2. note the raw materials used for production and the finished products produced</p> <p>SA3. note the readings of the process parameters and provide necessary information to fill the process chart</p> <p>SA4. note down observations (if any) related to the process</p> <p>SA5. write information documents to internal departments/ internal teams</p> <p>SA6. note down the data for ERP or as required by the organization</p> <p><b>Reading Skills</b></p>

FIC/N5008

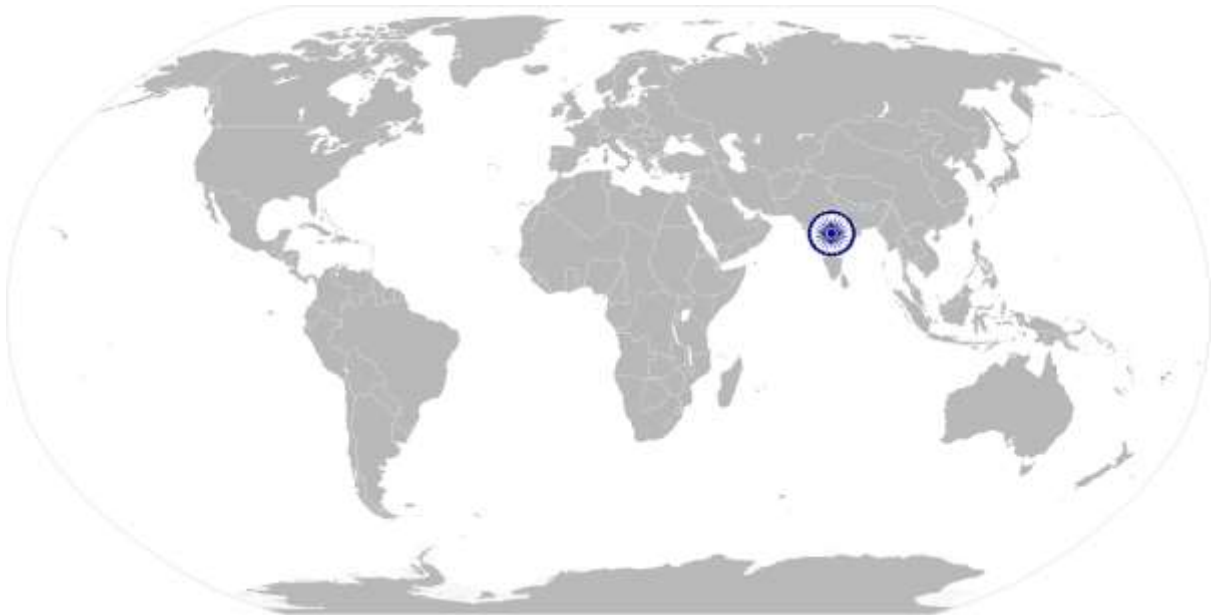
**Complete documentation and record keeping related to production of baked products in artisan bakeries and patisseries.**

	<p>The user/individual on the job needs to know and understand how to:</p> <ul style="list-style-type: none"> <li>SA7. read and interpret the process required for producing various types of products</li> <li>SA8. read and interpret and process flowchart for all products produced</li> <li>SA9. read equipment manuals and process documents to understand the equipment operation and process requirement</li> <li>SA10. read internal information documents sent by internal teams</li> </ul>
	<p><b>Oral Communication (Listening and Speaking skills)</b></p>
	<p>The user/individual on the job needs to know and understand how to :</p> <ul style="list-style-type: none"> <li>SA11. discuss task lists, schedules and activities with the supervisor</li> <li>SA12. effectively communicate with the team members</li> <li>SA13. question the supervisor in order to understand the nature of the problem and to clarify queries</li> <li>SA14. attentively listen and comprehend the information given by the speaker</li> <li>SA15. communicate clearly with the supervisor and cross department team on the issues faced</li> </ul>
<b>B. Professional Skills</b>	<p><b>Decision Making</b></p>
	<p>The user/individual on the job needs to know and understand how to:</p> <ul style="list-style-type: none"> <li>SB1. analyse critical points in day to day tasks through experience and observation and identify control measures to solve the issue</li> <li>SB2. handle issues in case the supervisor is not available (as per the authority matrix defined by the organization)</li> </ul>
	<p><b>Plan and Organize</b></p>
	<p>The user/individual on the job needs to know and understand how to:</p> <ul style="list-style-type: none"> <li>SB3. plan and organize the work order and jobs received from the supervisor</li> <li>SB4. organize raw materials and packaging materials required for all products following the instruction provided by the supervisor</li> <li>SB5. plan and prioritize the work based on the instructions received from the supervisor</li> <li>SB6. plan to utilise time and equipment's effectively</li> <li>SB7. organize all process/ equipment manuals so as to access information easily</li> <li>SB8. support the supervisor in scheduling tasks for helper(s)</li> </ul>
	<p><b>Customer Centricity</b></p>
	<p>The user/individual on the job needs to know and understand how to:</p> <ul style="list-style-type: none"> <li>SB9. understand customer requirements and their priority and respond as per their needs</li> </ul>
	<p><b>Problem Solving</b></p>
	<p>The user/individual on the job needs to know and understand how to:</p> <ul style="list-style-type: none"> <li>SB10. support supervisor in solving problems by detailing out problems</li> <li>SB11. discuss the possible solutions with the supervisor for problem solving</li> </ul>
	<p><b>Analytical Thinking</b></p>
	<p>The user/individual on the job needs to know and understand how to:</p> <ul style="list-style-type: none"> <li>SB12. apply domain information about maintenance processes and technical knowledge about tools and equipment</li> </ul>
	<p><b>Critical Thinking</b></p>
	<p>The user/individual on the job needs to know and understand how to:</p>

FIC/N5008

**Complete documentation and record keeping related to production of baked products in artisan bakeries and patisseries.**

	<p>SB13. use common sense and make judgments on day to day basis</p> <p>SB14. use reasoning skills to identify and resolve basic problems</p> <p>SB15. use intuition to detect any potential problems which could arise during operations</p> <p>SB16. use acquired knowledge of the process for identifying and handling issues</p>
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**FIC/N5008** Complete documentation and record keeping related to production of baked products in artisan bakeries and patisseries.

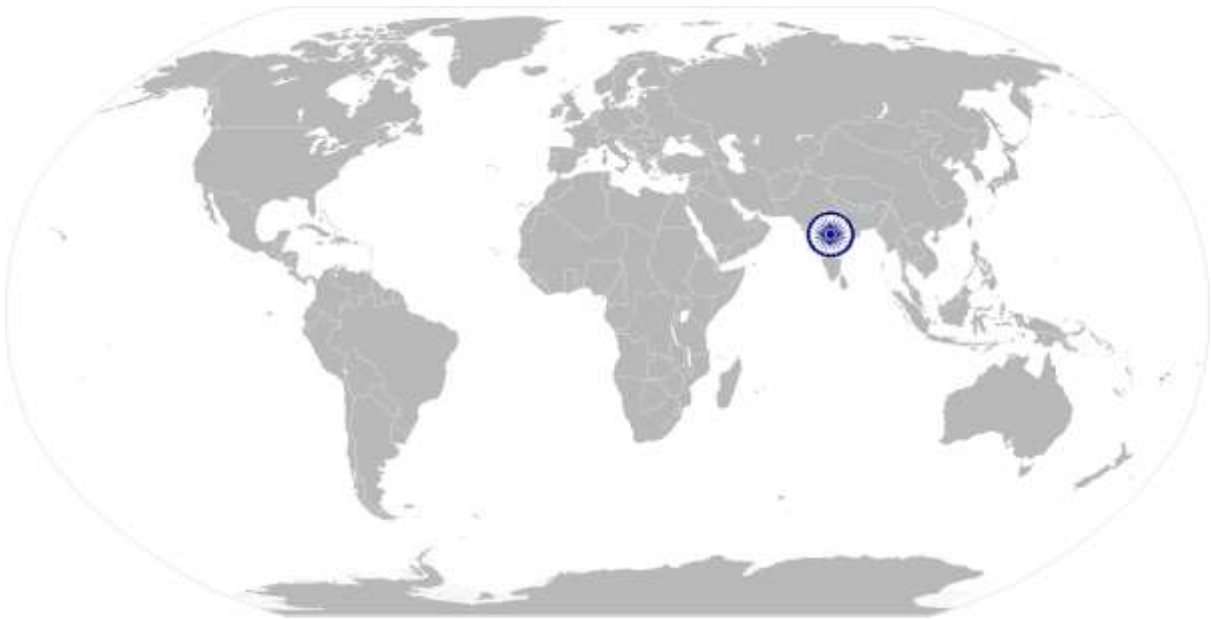
## NOS Version Control

NOS Code	FIC/N5008		
Credits (NSQF)	TBD	Version number	1.0
Industry	Food Processing	Drafted on	23/06/2015
Industry Sub-sector	Bread and bakery	Last reviewed on	03/07/2015
Occupation	Processing	Next review date	02/07/2016

[Back to Top](#)



# National Occupational Standard



## Overview

This OS unit is about maintaining food safety, hygiene and sanitation in work area and processing unit for processing food products.

FIC/N9001

**Food safety, hygiene and sanitation for processing food products**

National Occupational Standard

<b>Unit Code</b>	<b>FIC/N9001</b>
<b>Unit Title(Task)</b>	<b>Food safety, hygiene and sanitation for processing food products</b>
<b>Description</b>	This unit is about maintaining food safety, hygiene and sanitation in work area and processing unit, for processing food products.
<b>Scope</b>	The scope of this role will include: <ul style="list-style-type: none"> <li>• Perform safety and sanitation related functions ( for processing food products)</li> <li>• Apply food safety practices ( for processing food products)</li> </ul>
<b>Performance Criteria(PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Perform safety and sanitation related functions (for processing food products)</b>	<p>PC1. comply with food safety and hygiene procedures followed in the organization</p> <p>PC2. ensure personal hygiene by using of gloves, hairnets, masks, ear plugs, goggles, shoes, etc.</p> <p>PC3. ensure hygienic production of food by inspecting raw materials, ingredients, finished products, etc. for compliance to physical, chemical and microbiological parameters</p> <p>PC4. pack products in appropriate packaging materials, label and store them in designated area, free from pests, flies and infestations</p> <p>PC5. clean, maintain and monitor food processing equipment periodically, using it only for the specified purpose</p> <p>PC6. use safety equipment such as fire extinguisher, first aid kit and eye-wash station when required</p> <p>PC7. follow housekeeping practices by having designated area for materials/tools</p> <p>PC8. follow industry standards such as GMP and HACCP and product recall process</p> <p>PC9. attend training on hazard management to understand types of hazards such as physical, chemical and biological hazards and measures to control and prevent them</p> <p>PC10. identify, document and report problems such as rodents and pests to management</p> <p>PC11. conduct workplace checklist audits before and after work to ensure safety and hygiene</p> <p>PC12. document and maintain raw material, packaging material, process and finished products for the credibility and effectiveness of the food safety control system</p>
<b>Apply food safety practices (for processing food products)</b>	<p>PC13. determine the quality of food using criteria such as aroma, appearance, taste and best before date, and take immediate measures to prevent spoilage</p> <p>PC14. store raw materials, finished products, allergens separately to prevent cross-contamination</p> <p>PC15. label raw materials and finished products and store them in designated storage areas according to safe food practices</p> <p>PC16. follow stock rotation based on FEFO/ FIFO</p>

FIC/N9001

Food safety, hygiene and sanitation for processing food products

Knowledge and Understanding (K)

**E. Organizational Context**  
(Knowledge of the organization and its processes)

The user/individual on the job needs to know and understand:

- KA1. organization standards, process standards and procedures followed in the organization
- KA2. types of products produced by the organization
- KA3. code of business conduct
- KA4. dress code to be followed
- KA5. job responsibilities/duties and standard operating procedures
- KA6. internal processes such as procurement, store management, inventory management, quality management and key contact points for query resolution
- KA7. provision of wages, working hours as per organization policy
- KA8. food safety and hygiene standards followed

**B. Technical Knowledge**

The user/individual on the job needs to know and understand:

- KB1. possible physical, chemical and biological hazards and methods of prevention of various hazards
- KB2. personal hygiene requirement
- KB3. different types of sanitizers used for process area, equipment and the procedure to use them
- KB4. knowledge on Food Safety Standards and Regulations (as per FSSAI)
- KB5. quality parameters and quality assessment based on physical parameters, basic food microbiology
- KB6. labelling/marking requirements for raw materials, finished goods, stored materials, packaging materials and their designated storage area
- KB7. cleaning and sanitation of equipment and work area
- KB8. CIP and COP methods and procedures
- KB9. storage norms for raw materials, packaging material and finished products
- KB10. stock rotation of ingredients and finished products based on FEFO/FIFO
- KB11. method of maintaining safety check lists for all machineries
- KB12. GHP
- KB13. GMP
- KB14. HACCP

Skills (S)

**D. Core Skills/ Generic Skills**

**Writing Skills**

The user/ individual on the job needs to know and understand how to:

- SA1. note the information communicated by the supervisor
- SA2. note the raw materials used for production and the finished products produced
- SA3. note the readings of the process parameters and provide necessary information to fill the process chart
- SA4. note down observations (if any) related to the process
- SA5. write information documents to internal departments/ internal teams
- SA6. note down the data for ERP or as required by the organization

**Reading Skills**

The user/individual on the job needs to know and understand how to:

- SA7. read and interpret the process required for producing various types of products
- SA8. read and interpret and process flowchart for all products produced
- SA9. read equipment manuals and process documents to understand the



FIC/N9001

**Food safety, hygiene and sanitation for processing food products**

	<p>equipment operation and process requirement</p> <p>SA10. read internal information documents sent by internal teams</p>
	<p><b>Oral Communication (Listening and Speaking skills)</b></p>
	<p>The user/individual on the job needs to know and understand how to :</p> <p>SA11. discuss task lists, schedules and activities with the supervisor</p> <p>SA12. effectively communicate with the team members</p> <p>SA13. question the supervisor in order to understand the nature of the problem and to clarify queries</p> <p>SA14. attentively listen and comprehend the information given by the speaker</p> <p>SA15. communicate clearly with the supervisor and cross department team on the issues faced</p>
<b>B. Professional Skills</b>	<p><b>Decision Making</b></p>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB1. analyse critical points in day to day tasks through experience and observation and identify control measures to solve the issue</p> <p>SB2. handle issues in case the supervisor is not available (as per the authority matrix defined by the organization)</p>
	<p><b>Plan and Organize</b></p>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB3. plan and organize the work order and jobs received from the supervisor</p> <p>SB4. organize raw materials and packaging materials required for all products following the instruction provided by the supervisor</p> <p>SB5. plan and prioritize the work based on the instructions received from the supervisor</p> <p>SB6. plan to utilise time and equipment's effectively</p> <p>SB7. organize all process/ equipment manuals so as to access information easily</p> <p>SB8. support the supervisor in scheduling tasks for helper(s)</p>
	<p><b>Customer Centricity</b></p>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB9. understand customer requirements and their priority and respond as per their needs</p>
	<p><b>Problem Solving</b></p>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB10. support supervisor in solving problems by detailing out problems</p> <p>SB11. discuss the possible solutions with the supervisor for problem solving</p>
	<p><b>Analytical Thinking</b></p>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB12. apply domain information about maintenance processes and technical knowledge about tools and equipment</p>
	<p><b>Critical Thinking</b></p>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB13. use common sense and make judgments on day to day basis</p> <p>SB14. use reasoning skills to identify and resolve basic problems</p> <p>SB15. use intuition to detect any potential problems which could arise during operations</p> <p>SB16. use acquired knowledge of the process for identifying and handling issues</p>

**FIC/N9001 Food safety, hygiene and sanitation for processing food products**

**NOS Version Control**

NOS Code	FIC/N9001		
Credits (NSQF)	TBD	Version number	1.0
Industry	Food Processing	Drafted on	23/06/2015
Industry Sub-sector	Bread and bakery	Last reviewed on	03/07/2015
Occupation	Processing	Next review date	02/07/2016

[Back to Top](#)

## Assessment Criteria

### CRITERIA FOR ASSESSMENT OF TRAINEES

**Job Role** Craft Baker

**Qualification Pack** FIC/Q5002

**Sector Skill Council** Food Processing

#### Guidelines for Assessment

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC
2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC
3. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below)
4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training center based on this criteria
5. To pass the Qualification Pack, every trainee should score a minimum of 50% in every NOS and overall 50% pass percentage in every QP
6. To pass the Qualification Pack, every trainee should score a minimum of 33% in Theory and 50% in Practical
7. In case of successfully passing only certain number of NOS's, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack

		Marks Allocation			
		Total Marks	Out Of	Theory	Skills Practical
<b>1.FIC/N5005(Prepare and maintain work area and machineries for producing baked products in artisan bakeries and patisseries)</b>	PC1. Clean and maintain the cleanliness of the work area using approved sanitizers and keep it free from dust, waste, flies and pests	<b>100</b>	25	10	15
	PC2. Ensure that the work area is safe and hygienic for food processing		10	3	7
	PC3. Dispose waste materials as per standard operating procedures and industry requirements		15	5	10
	PC4. Check the working and performance of all machineries and tools used for production		15	5	10
	PC5. Clean the machineries and tools used with approved sanitizers following specifications and SOPs		15	5	10
	PC6. Place the necessary tools required for the process		5	2	3

**Assessment Criteria**

	PC7. Attend minor repairs/ faults of machines, if required		15	5	10
			<b>100</b>	<b>35</b>	<b>65</b>
<b>2. FIC/N5006(Prepare for production of baked products in artisan bakeries and patisseries)</b>	PC1. Read and understand the production order from the supervisor (or) calculate the type of products and quantity of products to be produced based on sales of the outlet	<b>100</b>	10	4	6
	PC2. Check the availability of raw materials, packaging materials, equipment and manpower		5	2	3
	PC3. Plan production sequence by: <ul style="list-style-type: none"> <li>Grouping products which are of the same type (fermented/unfermented products)</li> <li>Selecting raw materials that do not impact the quality of the other</li> <li>Using the same equipment and machinery for various products</li> <li>Planning maximum capacity utilization of machineries</li> <li>Considering the process time for each product</li> <li>Planning efficient utilization of resources/manpower</li> <li>Prioritizing urgent orders</li> </ul>		15	5	10
	PC4. Calculate the batch size based on the production order and machine capacity		5	2	3
	PC5. Calculate the raw material requirement (considering the process loss) to produce the required quantity of finished product(s)		5	2	3
	PC6. Calculate the raw materials (including ingredients, if any), packaging materials and manpower requirement for the completing the order		5	2	3

### Assessment Criteria

	PC7. Check the working and performance of equipment required for the baking process		7	2	5
	PC8. Calculate the lead time from mixing to oven loading for effective utilization of baking equipments		7	2	5
	PC9. Plan batch size considering full capacity utilization of equipments		3	1	2
	PC10. Plan to utilize equipments for multiple products without affecting the quality of the finished products, and to optimize production and save energy		3	1	2
	PC11. Allot responsibilities/ work to the assistants and helpers"		5	2	3
	PC12. Refer to the process chart/ product flow chart/formulation chart for product(s) produced		5	1	4
	PC13. Check the conformance of raw material quality to organization standards through physical parameters such as appearance, colour, texture, etc.		5	1	4
	PC14. Weigh the raw materials required for the batch (including ingredients, additives, preservatives, etc.) accurately, considering that exact quantity of ingredients and additives are responsible for final yield and quality of the finished products		5	1	4
	PC15. Start machine and check its working and performance, make minor adjustments or repairs (if required)		10	5	5
	PC16. Keep tools accessible to attend repairs/faults in case of breakdown		5	2	3
			<b>100</b>	<b>35</b>	<b>65</b>
<b>3. FIC/N5007(Produce baked products in artisan bakeries and patisseries)</b>	PC1. Check the quality of ingredients through physical parameters such as appearance, colour, odour, texture, etc. For its conformance to organization standards	<b>100</b>	5	2	3

### Assessment Criteria

PC2. Weigh and accurately measure all ingredients as per formulation and transfer the weighed raw materials to the working bench/ mixing table	5	2	3
PC3. Cream the shortenings till it reach the required consistency	2	0.5	1.5
PC4. Knead/mix the ingredient to prepare dough/batter of required consistency	5	2	3
PC5. Check the quality of the dough/batter for its conformance to the defined SOP's	5	2	3
PC6. Transfer the dough into a container and allow it to stand for specified time for fermentation and periodically check the consistency and texture to determine the level of fermentation	2	0.5	1.5
PC7. Dust the table with flour and transfer the dough from the container to the table dusted with flour	5	2	3
PC8. Stretch and fold the fermented dough for degassing, brush the dough surface to remove excess flour and transfer dough back to the dough container for continued fermentation	2	0.5	1.5
PC9. Repeat stretch and fold four to five times to obtain desired consistency	2	0.5	1.5
PC10. cut the dough and weigh the quantity required for making the product and mould dough into loaves or form to desired shape	2	0.5	1.5
PC11. Sprinkle topping such as spices, cereals, seeds, etc. for making special rolls or breads and place the loaves or shaped dough in the bread box/mould or baking pans	3	1	2
PC12. Check the water level in the proof box and set to the required time, temperature and humidity and load the proof box with the bread box/mould filled with dough, following production sequence	2	1	1
PC13. Monitor proof box parameters such as temperature/humidity during proofing process, monitor raising of dough in the proof box and remove the bread mould out of proof box after dough has rise to specified height	2	1	1
PC14. Sprinkle flour on dough and work bench to prevent dough from sticking, and roll dough to desired thickness with rolling pin to make	2	0.5	1.5

### Assessment Criteria

cookies and biscuits			
PC15. Cut the dough to desired shape using cookie cutter, spread or sprinkle toppings on the shaped dough	1	0.5	0.5
PC16. Grease or flour the baking pans and place the shaped dough in it	2	0.5	1.5
PC17. Pour the measured quantity of batter( cake batter) into the moulds of various shape	2	0.5	1.5
PC18. Start the oven and set the temperature for preheating	2	0.5	1.5
PC19. Set the oven temperature and baking time for the product referring to the process parameter chart, load the filled baking pans in the oven and observe spacing between the pans	2	0.5	1.5
PC20. Monitor oven parameters such as temperature and time during baking process	2	0.5	1.5
PC21. Observe colour of baking product to detect over baking and to achieve finished product of uniform quality	2	0.5	1.5
PC22. Unload the baked products from the oven and check the quality of the product through physical parameters such as colour, size, appearance, texture, aroma, etc. And ensure that the product meets the required standards	2	0.5	1.5
PC23. Unload the pans/trays immediately after removing from the oven and place baked product on the cooling racks for cooling, and stack the emptied baking pans in the designated area	2	1	1
PC24. Adjust or reset controls to load the next batch/ product in the oven	2	1	1
PC25. Weigh the baked product to check the yield (from raw material to finished product)	2	1	1
PC26. Slice, pack, label and store the product following the product requirement / defined SOP's	2	1	1
PC27. Report discrepancies/concerns in each stage of production to department supervisor for immediate action	2	1	1

### Assessment Criteria

	PC28. Create designs based on concepts of colour, shape, texture, pattern, form, etc. Or check designs from production order for developing specialty bakery products such as wedding cakes, celebration cakes, etc.		2	1	1
	PC29. Organize tools and equipments required for filling, trimming, masking, covering, decoration and storage of specialty bakery products		2	0.5	1.5
	PC30. Check the quality of finishing materials such as icings, fondants, glazes, chocolate, fruits, grains, nuts, etc. Required for preparation of specialty bakery products		2	0.5	1.5
	PC31. Cut and shape the cake for decoration		2	0.5	1.5
	PC32. Prepare icings, fondants, colours, fruits, etc. Required according to the design		3	1	2
	PC33. Apply glazes, icings, or other toppings to baked goods using spatulas, brushes, piping bags, etc.		3	1	2
	PC34. Check the decorated product for its conformance to customer order or organization standards		2	0.5	1.5
	PC35. Check and maintain cleanliness and required storage conditions for the product		1	0.5	0.5
	PC36. Set and maintain temperature of the refrigeration system for storage of finished product		3	1	2
	PC37. Store the specialty bakery products following the product requirement and defined sops		3	1	2
	PC38. Clean the work area, machineries, equipment and tools using recommended cleaning agents and sanitizers		3	1	2
	PC39. Attend minor repairs/faults of all machines (if any)		2	0.5	1.5
	PC40. Ensure periodic (daily/weekly/monthly/quarterly/half yearly/annual) maintenance of all machines and equipment following the SOP or following suppliers instructions/manuals		3	1	2
			<b>100</b>	<b>35</b>	<b>65</b>
<b>4. FIC/N5008 (Complete documentation and</b>	PC1. Document and maintain record of details of all raw materials used such	<b>100</b>	10	6	4



**Assessment Criteria**

record keeping related to production of baked products in artisan bakeries and patisseries)	as names of raw materials, supplier details, receiving date/ date of manufacture, expiry date, supplier quality document, quality parameters for all raw materials, internal quality analysis report, etc., as per organization standards			
	PC2. Maintain record of observations (if any) related to raw materials and packaging materials	5	3	2
	PC3. Load the raw material details in computer or in the ERP system followed by the organization for future reference	5	3	2
	PC4. Verify the documents and track from finished product to raw materials, in case of quality concerns and during quality management system audits	5	3	2
	PC5. Document and maintain records of production details such as the product produced, production sequence, equipment and machinery details, efficiency and capacity utilization of equipment, etc.	10	6	4
	PC6. Document and maintain records of process details such as type of raw material used, process parameters (temperature, time etc. as applicable) for the entire process in process chart or production log for all products produced	15	9	6
	PC7. Document and maintain record of batch size, raw material used, yield after each stage of process, wastage, energy utilization and final products produced	10	6	4
	PC8. Maintain record of observations or deviations (if any) related to production and process parameters	5	3	2
	PC9. Load the production and process parameter details in computer or in the ERP system followed by the organization for future reference	5	3	2
	PC10. Verify documents and track them from finished product to raw	5	3	2

**Assessment Criteria**

	materials, in case of quality concerns, and during quality management system audits				
	PC11. Document and maintain records 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., as per organization standards		10	6	4
	PC12. Maintain record of observations or deviations (if any) related to finished products		5	3	2
	PC13. Load the finished product details in computer or in the ERP system followed by the organization for future reference		5	3	2
	PC14. Verify the documents and track them from finished product to raw materials, in case of quality concerns, and during quality management system audits		5	3	2
			<b>100</b>	<b>60</b>	<b>40</b>
<b>5. FIC/N9001 (Food safety, hygiene and sanitation for processing food products)</b>	PC1. Comply with food safety and hygiene procedures followed in the organization		5	2	3
	PC2. Ensure personal hygiene by using of gloves, hairnets, masks, ear plugs, goggles, shoes, etc.		6	1	5
	PC3. Ensure hygienic production of food by inspecting raw materials, ingredients, finished products, etc. for compliance to physical, chemical and microbiological parameters		5	2	3
	PC4. Pack products in appropriate packaging materials, label and store them in designated area, free from pests, flies and infestations		10	4	6
	PC5. Clean maintain and monitor food processing equipment periodically, using it only for specified purpose		5	2	3
	PC6. Use safety equipment such as fire		10	4	6

### Assessment Criteria

	extinguisher, first aid kit and eye-wash station when required			
	PC7. Follow housekeeping practices by having designated area for materials/tools	5	2	3
	PC8. Follow industry standards like GMP and HACCP and product recall process	10	4	6
	PC9. Attend training on hazard management to understand types of hazards such as physical, chemical and biological hazards and measures to control and prevent them	5	1	4
	PC10. Identify, document and report problems such as rodents and pests to management	5	1	4
	PC11. Conduct workplace checklist audits before and after work to ensure safety and hygiene	5	1	4
	PC12. Document and maintain raw material, packaging material, process and finished products for the credibility and effectiveness of the food safety control system	4	1	3
	PC13. Determine the quality of food using criteria such as aroma, appearance, taste and best before date, and take immediate measures to prevent spoilage	5	2	3
	PC14. Store raw materials, finished products, allergens separately to prevent cross-contamination	5	2	3
	PC15. Label raw materials and finished products and store them in designated storage areas according to safe food practices	5	2	3
	PC16. Follow stock rotation based on FEFO / FIFO	10	4	6
		<b>100</b>	<b>35</b>	<b>65</b>

SSC	QPCode	Name of the QP	NSQF Level	Equipment Name	Min. no. of Equipment required (per batch of 30 trainees)	Unit Type	Is this a mandatory Equipment to be available at the Training Center (Yes/No)	Dimension/Specification/Description of the Equipment/ ANY OTHER REMARK
Food Processing	FIC/Q5002	Craft Baker	4	Lab Scale Ovens	2	pieces	Yes	Electrical, 2 Deck Oven, Min. 4 Tray (3kw each)
Food Processing	FIC/Q5002	Craft Baker	4	Baking Sheet & Racks	2	pieces	Yes	Min. 4 rack x 2 sets (electrical of 2 kw each)
Food Processing	FIC/Q5002	Craft Baker	4	Commercial Mixers	2	pieces	Yes	Min. 2 kg capacity (electrical 300w each)
Food Processing	FIC/Q5002	Craft Baker	4	Wire Whiskers	1	pieces	Yes	Fire resistant with wood handle
Food Processing	FIC/Q5002	Craft Baker	4	Refrigerator	1	pieces	Yes	Min. 100 liters (1kw)
Food Processing	FIC/Q5002	Craft Baker	4	Refrigerator	1	pieces	No	300 liters (1.5kw)
Food Processing	FIC/Q5002	Craft Baker	4	Fryer	1	pieces	Yes	electrical fryer – Min. 1 kg (SS made, 500w)
Food Processing	FIC/Q5002	Craft Baker	4	Baking Pan	2	pieces	Yes	Loaf pan/ Pie pan/ cake Pan (electrical 300w each)
Food Processing	FIC/Q5002	Craft Baker	4	Cooling Racks	2	pieces	Yes	with small blower (50w)
Food Processing	FIC/Q5002	Craft Baker	4	Bread Slicer Manual/ Mechanical	1	pieces	Yes	with a 50w motor

Food Processing	FIC/Q5002	Craft Baker	4	Cake Decorative Tools	2	pieces	Yes	
Food Processing	FIC/Q5002	Craft Baker	4	Bread Slicer Manual	1	pieces	Yes	
Food Processing	FIC/Q5002	Craft Baker	4	Knives	2	pieces	Yes	of all types
Food Processing	FIC/Q5002	Craft Baker	4	Spatula	2	pieces	Yes	of all sizes
Food Processing	FIC/Q5002	Craft Baker	4	Utensils	5	pieces	Yes	min. 1 kg capacity SS utensils with lids, 6 – 7 SS plates 12” diameter
Food Processing	FIC/Q5002	Craft Baker	4	Mixing Bowl	2	pieces	Yes	of different sizes 2lit to 3lit capacity
Food Processing	FIC/Q5002	Craft Baker	4	Work Table	2	pieces	Yes	4’ x 10’ SS tables
Food Processing	FIC/Q5002	Craft Baker	4	Sinks	2	pieces	Yes	with water connection
Food Processing	FIC/Q5002	Craft Baker	4	Measuring Cup & Spoon	2	pieces	Yes	1 set is of 10 ml/ 50 ml/100 ml/250 ml/ 500 ml
Food Processing	FIC/Q5002	Craft Baker	4	Thermometer	3	pieces	Yes	2 of them should measure about 400 degree Celsius. One of them at below freezing
Food Processing	FIC/Q5002	Craft Baker	4	Timer	2	pieces	Yes	
Food Processing	FIC/Q5002	Craft Baker	4	Digital Hygrometer	2	pieces	Yes	
Food Processing	FIC/Q5002	Craft Baker	4	Lab Equipment For Testing	1	pieces	no	simple microscope, grinding machine (small size), plate heater
Food Processing	FIC/Q5002	Craft Baker	4	Lab Chemicals For Testing And Glassware	1	pieces	No	beaker, test tube, measuring cylinder, Petri dish, glass slides
Food Processing	FIC/Q5002	Craft Baker	4	Packing, Wraps Rolls	1	pieces	Yes	Food grade Aluminum foils

Food Processing	FIC/Q5002	Craft Baker	4	Packing, Wraps Rolls	1	pieces	Yes	Food grade HDPE film transparent
Food Processing	FIC/Q5002	Craft Baker	4	Aprons	30	pieces	Yes	For all students (returnable basis)
Food Processing	FIC/Q5002	Craft Baker	4	Cleaning Tools	1	pieces	Yes	
Food Processing	FIC/Q5002	Craft Baker	4	Weighing Scale	1	pieces	Yes	Min. 5kg
Food Processing	FIC/Q5002	Craft Baker	4	Gas Burner (Lpg)	1	pieces	Yes	attached to LPG commercial cylinder
Food Processing	FIC/Q5002	Craft Baker	4	Lpg Cylinders	2	pieces	Yes	each cylinder should run for 120 hrs (refill cost@Rs1500/ per cylinder)
Food Processing	FIC/Q5002	Craft Baker	4	Heat Resistant Gloves, Protective Gloves	1	pieces	Yes	Set of one dozen @ Rs. 500/ per dozen
Food Processing	FIC/Q5002	Craft Baker	4	Fire Extinguishers	2	pieces	Yes	near the gas burner/ LPG cylinders and ovens
Food Processing	FIC/Q5002	Craft Baker	4	High Speed Exhausts	2	pieces	Yes	one on each wall of the lab
Food Processing	FIC/Q5002	Craft Baker	4	Masks – Head Cover, Mouth Cover	35	pieces	Yes	re usable