

## Qualification Pack



# Plant Biscuit Production Specialist

QP Code: FIC/Q5003

Version: 3.0

NSQF Level: 4

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## Qualification Pack

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### FIC/Q5003: Plant Biscuit Production Specialist

#### Brief Job Description

A Plant Biscuit Production Specialist produces biscuits in industrial units as per defined SOPs in synchronisation with rest of the plant/unit by weighing, mixing, kneading, rolling/sheeting, cutting, moulding, baking, cooling, etc. either manually or using machineries following the defined SOPs of the plant/unit.

#### Personal Attributes

A Plant Biscuit Production Specialist must have the ability to plan, organize, prioritize, calculate and handle pressure. S/he must 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.

#### Applicable National Occupational Standards (NOS)

##### Compulsory NOS:

1. [FIC/N5009: Prepare and maintain work area and process machineries for producing biscuits in industrial units](#)
2. [FIC/N5010: Prepare for production of biscuits in industrial units](#)
3. [FIC/N5011: Produce biscuits in industrial units](#)
4. [FIC/N5012: Complete documentation and record keeping related to production of biscuits in industrial units](#)
5. [FIC/N9001: Ensure food safety, hygiene and sanitation for processing food products](#)
6. [DGT/VSQ/N0102: Employability Skills \(60 Hours\)](#)

#### Qualification Pack (QP) Parameters

<b>Sector</b>	Food Processing
<b>Sub-Sector</b>	Bread and Bakery
<b>Occupation</b>	Processing-Bread and Bakery
<b>Country</b>	India

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<b>NSQF Level</b>	4
<b>Credits</b>	11
<b>Aligned to NCO/ISCO/ISIC Code</b>	NCO-2004/NIL
<b>Minimum Educational Qualification &amp; Experience</b>	<p>11th grade pass OR Completed 1st year of 3-year diploma (after 10th) and pursuing regular diploma OR 10th grade pass plus 1-year NTC/ NAC OR 10th grade pass with 2 Years of experience relevant experience OR Previous relevant Qualification of NSQF Level (3) with 2 Years of experience relevant experience OR Previous relevant Qualification of NSQF Level (3.5) with 1 Year of experience relevant experience</p>
<b>Minimum Level of Education for Training in School</b>	
<b>Pre-Requisite License or Training</b>	<p>1. Baking process for all baked products 2. Operating different types of baking machines and equipments 3. GMP 4. HACCP 5. QMS 6. Computer basics and ERP 7. Training in food Safety Standards and Regulations (as per FSSAI) (Mandatory)</p>
<b>Minimum Job Entry Age</b>	18 Years
<b>Last Reviewed On</b>	NA
<b>Next Review Date</b>	30/09/2024
<b>NSQC Approval Date</b>	30/09/2021
<b>Version</b>	3.0
<b>Reference code on NQR</b>	2022/FI/FICSI/06693
<b>NQR Version</b>	2

#### Remarks:

Nil

## Qualification Pack

# FIC/N5009: Prepare and maintain work area and process machineries for producing biscuits in industrial units

## Description

Preparing work area for hygiene and safety, and ensuring performance, efficiency and maintenance of process machineries and tools for producing biscuits in industrial units as per the specifications and standards of the organization.

## Elements and Performance Criteria

### *Prepare and maintain work area ( for production of biscuits in industrial units)*

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

- PC1.** clean and maintain the cleanliness of the work area using approved sanitizers and keep it free from dust, waste, flies and pests
- PC2.** ensure that the work area is safe and hygienic for food processing
- PC3.** dispose waste materials as per defined SOPs and industry requirements

### *Prepare and maintain process machineries and tools ( for production of biscuits in industrial units)*

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

- PC4.** check the working and performance of all machineries and tools used for production such as proof box, oven, packaging machines, etc.
- PC5.** clean the machineries and tools used with approved sanitizers following specifications and sops
- PC6.** place the necessary tools required for process
- PC7.** attend to the minor repairs/ faults of all machines, if required

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** organization standards, process standards and procedures followed in the organization
- KU2.** types of products produced by the organization
- KU3.** code of business conduct
- KU4.** dress code to be followed
- KU5.** job responsibilities/duties and standard operating procedures
- KU6.** internal processes such as procurement, store management, inventory management, quality management and key contact points for query resolution
- KU7.** provision of wages, working hours as per organisation policy
- KU8.** food safety and hygiene standards followed
- KU9.** types of chemicals, materials and equipment required for cleaning and maintenance
- KU10.** cleaning process to disinfect equipment/ tools
- KU11.** supplier/manufacturers instructions related to cleaning and maintenance
- KU12.** knowledge on food safety standards and regulations (as per fssai)

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**KU13.** 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

### Generic Skills (GS)

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

- GS1.** note the information communicated by the supervisor
- GS2.** note the raw materials used for production and the finished products produced
- GS3.** note the readings of the process parameters and provide necessary information to fill the process chart
- GS4.** note down observations (if any) related to the process
- GS5.** write information documents to internal departments/ internal teams
- GS6.** note down the data for ERP or as required by the organization
- GS7.** read and interpret the process required for producing various types of products
- GS8.** read and interpret and process flowchart for all products produced
- GS9.** read equipment manuals and process documents to understand the equipment operation and process requirement
- GS10.** read internal information documents sent by internal teams
- GS11.** discuss task lists, schedules and activities with the supervisor
- GS12.** effectively communicate with the team members
- GS13.** question the supervisor in order to understand the nature of the problem and to clarify queries
- GS14.** attentively listen and comprehend the information given by the speaker
- GS15.** communicate clearly with the supervisor and cross department team on the issues faced
- GS16.** analyse critical points in day to day tasks through experience and observation and identify control measures to solve the issue
- GS17.** handle issues in case the supervisor is not available (as per the authority matrix defined by the organization)
- GS18.** plan and organize the work order and jobs received from the supervisor
- GS19.** organize raw materials and packaging materials required for all products following the instruction provided by the supervisor
- GS20.** plan and prioritize the work based on the instructions received from the supervisor
- GS21.** plan to utilise time and equipment's effectively
- GS22.** organize all process/ equipment manuals so as to access information easily
- GS23.** support the supervisor in scheduling tasks for helper(s)
- GS24.** understand customer requirements and their priority and respond as per their needs
- GS25.** support supervisor in solving problems by detailing out problems
- GS26.** discuss the possible solutions with the supervisor for problem solving
- GS27.** apply domain information about maintenance processes and technical knowledge about tools and equipment
- GS28.** use common sense and make judgments on day to day basis



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- GS29.** use reasoning skills to identify and resolve basic problems
- GS30.** use intuition to detect any potential problems which could arise during operations
- GS31.** use acquired knowledge of the process for identifying and handling issues

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### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Prepare and maintain work area ( for production of biscuits in industrial units)</i>	<b>18</b>	<b>32</b>	-	-
<b>PC1.</b> clean and maintain the cleanliness of the work area using approved sanitizers and keep it free from dust, waste, flies and pests	10	15	-	-
<b>PC2.</b> ensure that the work area is safe and hygienic for food processing	3	7	-	-
<b>PC3.</b> dispose waste materials as per defined SOPs and industry requirements	5	10	-	-
<i>Prepare and maintain process machineries and tools ( for production of biscuits in industrial units)</i>	<b>17</b>	<b>33</b>	-	-
<b>PC4.</b> check the working and performance of all machineries and tools used for production such as proof box, oven, packaging machines, etc.	5	10	-	-
<b>PC5.</b> clean the machineries and tools used with approved sanitizers following specifications and sops	5	10	-	-
<b>PC6.</b> place the necessary tools required for process	2	3	-	-
<b>PC7.</b> attend to the minor repairs/ faults of all machines, if required	5	10	-	-
<b>NOS Total</b>	<b>35</b>	<b>65</b>	-	-



## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	FIC/N5009
<b>NOS Name</b>	Prepare and maintain work area and process machineries for producing biscuits in industrial units
<b>Sector</b>	Food Processing
<b>Sub-Sector</b>	Bread and Bakery
<b>Occupation</b>	Processing
<b>NSQF Level</b>	4
<b>Credits</b>	TBD
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	30/09/2021
<b>Next Review Date</b>	30/09/2024
<b>NSQC Clearance Date</b>	30/09/2021

## Qualification Pack

### FIC/N5010: Prepare for production of biscuits in industrial units

#### Description

This unit is about preparation for production of biscuits in industrial units through planning of raw material and ingredients, machinery utilization and manpower requirement.

#### Elements and Performance Criteria

##### *Plan for production( for biscuits in industrial units)*

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

- PC1.** read and understand the production order from the supervisor
- PC2.** check the availability of raw materials and ingredients such as flour, sugar, shortenings, additives, preservatives, etc., packaging materials, working of machineries and availability of manpower
- PC3.** calculate total weight of dough required for order quantity (considering process loss)
- PC4.** plan production sequence by: grouping similar type of products (hard and soft biscuits) grouping similar type of dough (hard and soft dough) grouping products that require similar process and process parameters grouping products that require same processing machineries planning maximum capacity utilization of machineries avoiding clean-in-place (CIP) after each type of product planning efficient utilization of resources/manpower prioritizing urgent orders

##### *Plan equipment utilization and manpower ( for production of biscuits in industrial units)*

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

- PC5.** ensure the working and performance of each equipment required for the process
- PC6.** calculate the process time for each batch for effective utilization of machineries
- PC7.** plan batch size considering full capacity utilization of machineries
- PC8.** allot responsibilities/ work to the assistants and helpers

##### *Organize and check equipments and raw material for carrying out production ( for biscuits in industrial units)*

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

- PC9.** refer to the process chart/ product flow chart/formulation chart for product(s) produced
- PC10.** weigh the raw materials and ingredients required for the batch
- PC11.** check the conformance of raw material quality to organization standards by verifying the quality analysis report from the supplier/ internal lab and by checking the physical parameters like appearance, colour, aroma, texture etc
- PC12.** organize the equipments as per the process requirement
- PC13.** change dies, moulds, etc. and other parts of machineries to prepare for production
- PC14.** start machine and check the working and performance of the machine
- PC15.** make minor adjustments or repairs (if required)
- PC16.** keep the tools accessible to attend repairs/faults in case of breakdown

#### Knowledge and Understanding (KU)

## Qualification Pack

The individual on the job needs to know and understand:

- KU1.** organization standards, process standards and procedures followed in the organization
- KU2.** types of products produced by the organization
- KU3.** code of business conduct
- KU4.** dress code to be followed
- KU5.** job responsibilities/duties and standard operating procedures
- KU6.** internal processes such as procurement, store management, inventory management, quality management and key contact points for query resolution
- KU7.** provision of wages, working hours as per organisation policy
- KU8.** food safety and hygiene standards followed
- KU9.** types of raw materials, ingredients used in bakery
- KU10.** types of raw materials, ingredients, additives, etc. used for production of various types of biscuits
- KU11.** types of dough for making biscuits
- KU12.** methods for preparing various types of dough for biscuit making
- KU13.** process and process parameters for baking various types of biscuits
- KU14.** varieties of biscuits obtained from each type of dough
- KU15.** types of machineries used for making biscuits
- KU16.** types of machineries used in the baking units and machineries used in the organization
- KU17.** maintenance of baking equipments
- KU18.** supplier/manufacturers instructions for all baking machineries and equipments
- KU19.** basic mathematics to calculate raw material required for obtaining specified quantity of finished product
- KU20.** quality parameters and quality assessment based on physical parameters
- KU21.** food safety and hygiene
- KU22.** good manufacturing practice (GMP)
- KU23.** hazard analysis and critical control point (HACCP)

## Generic Skills (GS)

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

- GS1.** note the information communicated by the supervisor
- GS2.** note the raw materials used for production and the finished products produced
- GS3.** note the readings of the process parameters and provide necessary information to fill the process chart
- GS4.** note down observations (if any) related to the process
- GS5.** write information documents to internal departments/ internal teams
- GS6.** note down the data for ERP or as required by the organization
- GS7.** read and interpret the process required for producing various types of products
- GS8.** read and interpret and process flowchart for all products produced

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- GS9.** read equipment manuals and process documents to understand the equipment operation and process requirement
- GS10.** read internal information documents sent by internal teams
- GS11.** discuss task lists, schedules and activities with the supervisor
- GS12.** effectively communicate with the team members
- GS13.** question the supervisor in order to understand the nature of the problem and to clarify queries
- GS14.** attentively listen and comprehend the information given by the speaker
- GS15.** communicate clearly with the supervisor and cross department team on the issues faced
- GS16.** analyse critical points in day to day tasks through experience and observation and identify control measures to solve the issue
- GS17.** handle issues in case the supervisor is not available (as per the authority matrix defined by the organization)
- GS18.** plan and organize the work order and jobs received from the supervisor
- GS19.** organize raw materials and packaging materials required for all products following the instruction provided by the supervisor
- GS20.** plan and prioritize the work based on the instructions received from the supervisor
- GS21.** plan to utilise time and equipment's effectively
- GS22.** organize all process/ equipment manuals so as to access information easily
- GS23.** support the supervisor in scheduling tasks for helper(s)
- GS24.** understand customer requirements and their priority and respond as per their needs
- GS25.** supervisor in solving problems by detailing out problems
- GS26.** the possible solutions with the supervisor for problem solving
- GS27.** apply domain information about maintenance processes and technical knowledge about tools and equipment
- GS28.** use common sense and make judgments on day to day basis
- GS29.** use reasoning skills to identify and resolve basic problems
- GS30.** use intuition to detect any potential problems which could arise during operations
- GS31.** use acquired knowledge of the process for identifying and handling issues

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Plan for production( for biscuits in industrial units)</i>	<b>9</b>	<b>21</b>	-	-
<b>PC1.</b> read and understand the production order from the supervisor	1	4	-	-
<b>PC2.</b> check the availability of raw materials and ingredients such as flour, sugar, shortenings, additives, preservatives, etc., packaging materials, working of machineries and availability of manpower	2	3	-	-
<b>PC3.</b> calculate total weight of dough required for order quantity (considering process loss)	1	4	-	-
<b>PC4.</b> plan production sequence by: grouping similar type of products (hard and soft biscuits) grouping similar type of dough (hard and soft dough) grouping products that require similar process and process parameters grouping products that require same processing machineries planning maximum capacity utilization of machineries avoiding clean-in-place (CIP) after each type of product planning efficient utilization of resources/manpower prioritizing urgent orders	5	10	-	-
<i>Plan equipment utilization and manpower ( for production of biscuits in industrial units)</i>	<b>9</b>	<b>15</b>	-	-
<b>PC5.</b> ensure the working and performance of each equipment required for the process	2.5	4.5	-	-
<b>PC6.</b> calculate the process time for each batch for effective utilization of machineries	3	4	-	-
<b>PC7.</b> plan batch size considering full capacity utilization of machineries	1.5	1.5	-	-
<b>PC8.</b> allot responsibilities/ work to the assistants and helpers	2	5	-	-
<i>Organize and check equipments and raw material for carrying out production ( for biscuits in industrial units)</i>	<b>17</b>	<b>29</b>	-	-
<b>PC9.</b> refer to the process chart/ product flow chart/formulation chart for product(s) produced	2	3	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC10.</b> weigh the raw materials and ingredients required for the batch	2	3	-	-
<b>PC11.</b> check the conformance of raw material quality to organization standards by verifying the quality analysis report from the supplier/ internal lab and by checking the physical parameters like appearance, colour, aroma, texture etc	1	4	-	-
<b>PC12.</b> organize the equipments as per the process requirement	1	2	-	-
<b>PC13.</b> change dies, moulds, etc. and other parts of machineries to prepare for production	3	7	-	-
<b>PC14.</b> start machine and check the working and performance of the machine	2	3	-	-
<b>PC15.</b> make minor adjustments or repairs (if required)	5	5	-	-
<b>PC16.</b> keep the tools accessible to attend repairs/faults in case of breakdown	1	2	-	-
<b>NOS Total</b>	<b>35</b>	<b>65</b>	-	-

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	FIC/N5010
<b>NOS Name</b>	Prepare for production of biscuits in industrial units
<b>Sector</b>	Food Processing
<b>Sub-Sector</b>	Bread and Bakery
<b>Occupation</b>	Processing
<b>NSQF Level</b>	4
<b>Credits</b>	TBD
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	30/09/2021
<b>Next Review Date</b>	30/09/2024
<b>NSQF Clearance Date</b>	30/09/2021

## Qualification Pack

### FIC/N5011: Produce biscuits in industrial units

#### Description

This OS unit is about producing biscuits in industrial units as per the defined SOPs of the organization.

#### Elements and Performance Criteria

##### *Organize raw materials*

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

- PC1.** refer to the work order and formulation and organize all the ingredients required for the order
- PC2.** check the quality of each ingredient through physical parameters such as appearance, colour, odour, texture, etc. for its conformance to organization standards
- PC3.** weigh and measure all ingredients such as flour, fat, water, sugar, additives, flavours, spices, etc. required for product/batch and sift the ingredients manually (in manually operated unit)
- PC4.** set and control metering devices that weigh, measure, sift, and convey each approved ingredients into the mixing machine for each ingredients such as flour, fat, water, sugar, additives, approved flavours and colours spices etc required for the product (in mechanized unit)
- PC5.** check the scale indicators to confirm if specified amount of ingredients have been added

##### *Mix Ingredients*

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

- PC6.** mix all the ingredients manually to desired consistency
- PC7.** transfer all the ingredients together or sequentially into the mixer depending on the method followed by the organization
- PC8.** set the mixer speed, time and temperature depending on the mixing processes followed by the organization and start the mixer to mix and knead the ingredients to make hard/ soft dough for biscuits
- PC9.** control the mixing time and mixing temperature which are critical for making hard/soft dough for biscuits
- PC10.** check the dough consistency periodically until achieving dough of desired consistency
- PC11.** ferment the dough, if required

##### *Laminate and mould dough*

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

- PC12.** feed the hard dough into the layering or forming machines or dough feeder as required
- PC13.** ensure the correct forming and moulding of the dough
- PC14.** set the controls of each sheeting roller of the laminator machine to produce continuous sheet of hard dough as per specifications and standards (for hard dough)
- PC15.** set the required moulding roller/ cutter/ die)
- PC16.** set the controls of rotary cutter machine to cut the sheet of hard dough to desired size, shape and design as per specifications and standards of the organization
- PC17.** set the controls of the conveyors to separate the cut hard dough and control scrap return
- PC18.** control operation of the sprinkler



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**PC19.** set the controls of rotary cutter machine and start machine to mould soft dough to desired size, shape, weight and thickness as per specifications and standards of the organization (for soft dough)

**PC20.** ensure correct transfer of dough pieces to the oven band

### *Bake biscuits*

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

**PC21.** pre-heat the oven and set the oven parameters such as baking temperature and baking time (batch process), load the filled pans /moulds in the oven and bake the dough monitoring oven parameters during baking process

**PC22.** set and maintain the speed of the panning conveyor to control the shaped/moulded dough entering the tunnel oven (continuous process)

**PC23.** set the oven parameters such as temperature, time, conveyor speed, etc. and monitor the oven parameters during baking process

**PC24.** observe baking of biscuits through the observation window of the tunnel oven

**PC25.** observe quality of baked biscuit coming out of oven through parameters such as color, aroma, texture, etc. to detect over baking /under baking and control oven parameters to achieve finished product of uniform quality

**PC26.** remove non-conforming products from the conveyor

**PC27.** check the quality of the finished products through physical parameters such as colour, size, appearance, texture, aroma, taste, etc. and compare against standard

**PC28.** set, control and maintain speed of the cooling conveyor to cool the biscuit

### *Prepare centre filled/sandwich biscuits*

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

**PC29.** weigh the ingredients such as fat, sugar, chocolate, flavour, etc. required for preparing the cream/centre filling material for soft dough biscuits

**PC30.** transfer the ingredients into the mixer, set and adjust controls and start mixer to mix cream ingredients

**PC31.** transfer cream into the cream feed and set controls of metering devices of cream feed on the sandwiching machine

**PC32.** set controls of the sandwiching machine to fill measured quantity of cream on soft dough biscuit, position and place another soft dough biscuit over cream filled biscuit, press the biscuits and maintain the thickness of the cream biscuit

**PC33.** check the quality of the finished products through physical parameters such as colour, size, appearance, texture, aroma, taste etc. and compare against standard

**PC34.** remove non-conforming products from the conveyor

**PC35.** report discrepancies/concerns in each stage of production to department supervisor for immediate action

### *Post process cleaning and regular maintenance of equipments*

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

**PC36.** clean the work area, machineries, equipment and tools using recommended cleaning agents and sanitizers

**PC37.** attend minor repairs/faults of all machines (if any)

**PC38.** ensure periodic (daily/weekly/monthly/quarterly/half yearly/annual) maintenance of all machines and equipment following the sop or following suppliers instructions/manuals

## Qualification Pack

### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** organization standards, process standards and procedures followed in the organization
- KU2.** types of products produced by the organization
- KU3.** code of business conduct
- KU4.** dress code to be followed
- KU5.** job responsibilities/duties and standard operating procedures
- KU6.** internal processes such as procurement, store management, inventory management, quality management and key contact points for query resolution
- KU7.** provision of wages, working hours as per organisation policy
- KU8.** food safety and hygiene standards followed
- KU9.** types of raw materials, ingredients used in bakery
- KU10.** types of raw materials, ingredients, additives etc used for production of various types of biscuits
- KU11.** types of dough in bakery for preparing various types of biscuits
- KU12.** methods for preparing various types of dough
- KU13.** process parameters to prepare various types of dough
- KU14.** types of ingredients required for preparing different type of dough
- KU15.** types of biscuit products obtained from each type of dough
- KU16.** process and process parameters for preparing various types of biscuits
- KU17.** types of machineries used for making dough and in the baking process
- KU18.** types of machineries used in the baking units and machineries used in the organization
- KU19.** maintenance of baking equipments
- KU20.** supplier/manufacturers instructions for all baking machineries and equipments
- KU21.** basic mathematics to calculate raw material required for obtaining specified quantity of finished product
- KU22.** quality parameters and quality assessment based on physical parameters
- KU23.** food safety and hygiene
- KU24.** good manufacturing practice (GMP)
- KU25.** hazard analysis and critical control point (HACCP)

### Generic Skills (GS)

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

- GS1.** note the information communicated by the supervisor
- GS2.** note the raw materials used for production and the finished products produced
- GS3.** note the readings of the process parameters and provide necessary information to fill the process chart
- GS4.** note down observations (if any) related to the process

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- GS5.** write information documents to internal departments/ internal teams
- GS6.** note down the data for ERP or as required by the organization
- GS7.** read and interpret the process required for producing various types of products
- GS8.** read and interpret and process flowchart for all products produced
- GS9.** read equipment manuals and process documents to understand the equipment operation and process requirement
- GS10.** read internal information documents sent by internal teams
- GS11.** discuss task lists, schedules and activities with the supervisor
- GS12.** effectively communicate with the team members
- GS13.** question the supervisor in order to understand the nature of the problem and to clarify queries
- GS14.** attentively listen and comprehend the information given by the speaker
- GS15.** communicate clearly with the supervisor and cross department team on the issues faced
- GS16.** analyse critical points in day to day tasks through experience and observation and identify control measures to solve the issue
- GS17.** handle issues in case the supervisor is not available (as per the authority matrix defined by the organization)
- GS18.** plan and organize the work order and jobs received from the supervisor
- GS19.** organize raw materials and packaging materials required for all products following the instruction provided by the supervisor
- GS20.** plan and prioritize the work based on the instructions received from the supervisor
- GS21.** plan to utilise time and equipment's effectively
- GS22.** organize all process/ equipment manuals so as to access information easily
- GS23.** support the supervisor in scheduling tasks for helper(s)
- GS24.** understand customer requirements and their priority and respond as per their needs
- GS25.** support supervisor in solving problems by detailing out problems
- GS26.** discuss the possible solutions with the supervisor for problem solving
- GS27.** apply domain information about maintenance processes and technical knowledge about tools and equipment
- GS28.** use common sense and make judgments on day to day basis
- GS29.** use reasoning skills to identify and resolve basic problems
- GS30.** use intuition to detect any potential problems which could arise during operations
- GS31.** use acquired knowledge of the process for identifying and handling issues

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Organize raw materials</i>	<b>6</b>	<b>8</b>	-	-
<b>PC1.</b> refer to the work order and formulation and organize all the ingredients required for the order	1	1	-	-
<b>PC2.</b> check the quality of each ingredient through physical parameters such as appearance, colour, odour, texture, etc. for its conformance to organization standards	1	1	-	-
<b>PC3.</b> weigh and measure all ingredients such as flour, fat, water, sugar, additives, flavours, spices, etc. required for product/batch and sift the ingredients manually (in manually operated unit)	1	1	-	-
<b>PC4.</b> set and control metering devices that weigh, measure, sift, and convey each approved ingredients into the mixing machine for each ingredients such as flour, fat, water, sugar, additives, approved flavours and colours spices etc required for the product (in mechanized unit)	2	3	-	-
<b>PC5.</b> check the scale indicators to confirm if specified amount of ingredients have been added	1	2	-	-
<i>Mix Ingredients</i>	<b>3.5</b>	<b>8.5</b>	-	-
<b>PC6.</b> mix all the ingredients manually to desired consistency	0.5	0.5	-	-
<b>PC7.</b> transfer all the ingredients together or sequentially into the mixer depending on the method followed by the organization	0.5	1.5	-	-
<b>PC8.</b> set the mixer speed, time and temperature depending on the mixing processes followed by the organization and start the mixer to mix and knead the ingredients to make hard/ soft dough for biscuits	0.5	1.5	-	-
<b>PC9.</b> control the mixing time and mixing temperature which are critical for making hard/soft dough for biscuits	0.5	1.5	-	-
<b>PC10.</b> check the dough consistency periodically until achieving dough of desired consistency	0.5	1.5	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC11.</b> ferment the dough, if required	1	2	-	-
<i>Laminate and mould dough</i>	<b>6.5</b>	<b>15.5</b>	-	-
<b>PC12.</b> feed the hard dough into the layering or forming machines or dough feeder as required	1	2	-	-
<b>PC13.</b> ensure the correct forming and moulding of the dough	0.5	1.5	-	-
<b>PC14.</b> set the controls of each sheeting roller of the laminator machine to produce continuous sheet of hard dough as per specifications and standards (for hard dough)	0.5	1.5	-	-
<b>PC15.</b> set the required moulding roller/ cutter/ die)	0.5	1.5	-	-
<b>PC16.</b> set the controls of rotary cutter machine to cut the sheet of hard dough to desired size, shape and design as per specifications and standards of the organization	2	3	-	-
<b>PC17.</b> set the controls of the conveyors to separate the cut hard dough and control scrap return	0.5	1.5	-	-
<b>PC18.</b> control operation of the sprinkler	0.5	1.5	-	-
<b>PC19.</b> set the controls of rotary cutter machine and start machine to mould soft dough to desired size, shape, weight and thickness as per specifications and standards of the organization (for soft dough)	0.5	1.5	-	-
<b>PC20.</b> ensure correct transfer of dough pieces to the oven band	0.5	1.5	-	-
<i>Bake biscuits</i>	<b>10</b>	<b>16</b>	-	-
<b>PC21.</b> pre-heat the oven and set the oven parameters such as baking temperature and baking time (batch process), load the filled pans /moulds in the oven and bake the dough monitoring oven parameters during baking process	2	3	-	-
<b>PC22.</b> set and maintain the speed of the panning conveyor to control the shaped/moulded dough entering the tunnel oven (continuous process)	1	2	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC23.</b> set the oven parameters such as temperature, time, conveyor speed, etc. and monitor the oven parameters during baking process	0.5	1.5	-	-
<b>PC24.</b> observe baking of biscuits through the observation window of the tunnel oven	0.5	0.5	-	-
<b>PC25.</b> observe quality of baked biscuit coming out of oven through parameters such as color, aroma, texture, etc. to detect over baking /under baking and control oven parameters to achieve finished product of uniform quality	2	3	-	-
<b>PC26.</b> remove non-conforming products from the conveyor	1	2	-	-
<b>PC27.</b> check the quality of the finished products through physical parameters such as colour, size, appearance, texture, aroma, taste, etc. and compare against standard	2	3	-	-
<b>PC28.</b> set, control and maintain speed of the cooling conveyor to cool the biscuit	1	1	-	-
<i>Prepare centre filled/sandwich biscuits</i>	<b>5.5</b>	<b>11.5</b>	-	-
<b>PC29.</b> weigh the ingredients such as fat, sugar, chocolate, flavour, etc. required for preparing the cream/centre filling material for soft dough biscuits	1	2	-	-
<b>PC30.</b> transfer the ingredients into the mixer, set and adjust controls and start mixer to mix cream ingredients	1	2	-	-
<b>PC31.</b> transfer cream into the cream feed and set controls of metering devices of cream feed on the sandwiching machine	0.5	1.5	-	-
<b>PC32.</b> set controls of the sandwiching machine to fill measured quantity of cream on soft dough biscuit, position and place another soft dough biscuit over cream filled biscuit, press the biscuits and maintain the thickness of the cream biscuit	0.5	1.5	-	-
<b>PC33.</b> check the quality of the finished products through physical parameters such as colour, size, appearance, texture, aroma, taste etc. and compare against standard	0.5	1.5	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC34.</b> remove non-conforming products from the conveyor	1	1	-	-
<b>PC35.</b> report discrepancies/concerns in each stage of production to department supervisor for immediate action	1	2	-	-
<i>Post process cleaning and regular maintenance of equipments</i>	<b>3.5</b>	<b>5.5</b>	-	-
<b>PC36.</b> clean the work area, machineries, equipment and tools using recommended cleaning agents and sanitizers	1	1	-	-
<b>PC37.</b> attend minor repairs/faults of all machines (if any)	0.5	1.5	-	-
<b>PC38.</b> ensure periodic (daily/weekly/monthly/quarterly/half yearly/annual) maintenance of all machines and equipment following the sop or following suppliers instructions/manuals	2	3	-	-
<b>NOS Total</b>	<b>35</b>	<b>65</b>	-	-

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	FIC/N5011
<b>NOS Name</b>	Produce biscuits in industrial units
<b>Sector</b>	Food Processing
<b>Sub-Sector</b>	Bread and Bakery
<b>Occupation</b>	Processing
<b>NSQF Level</b>	4
<b>Credits</b>	TBD
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	30/09/2021
<b>Next Review Date</b>	30/09/2024
<b>NSQC Clearance Date</b>	30/09/2021



## Qualification Pack

# FIC/N5012: Complete documentation and record keeping related to production of biscuits in industrial units

## Description

This OS unit is about documenting and maintaining records of raw materials, process and finished products related to production of biscuits in industrial units.

## Elements and Performance Criteria

### *Document and maintain record of raw material ( for production of biscuits in industrial units)*

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

- PC1.** document and maintain record of all raw materials used for making biscuits such as name of raw materials, supplier details, batch number, receiving date/ date of manufacture, expiry date, supplier quality document, quality parameters of all raw materials, internal quality analysis report, etc. as per organizational standards
- PC2.** maintain record of observations (if any) related to raw materials
- PC3.** load the raw materials details in erp for future reference
- PC4.** verify the documents and track from finished product to raw materials, in case of quality concerns and during quality management system audit

### *Document and maintain record of production schedule and process parameters ( for production of biscuits in industrial units)*

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

- PC5.** document and maintain record of production details such as the product produced, production sequence, equipments and machinery details, efficiency and capacity utilization of equipment
- PC6.** document and maintain record of process details such as type of raw material used, type of dough, process parameters ( temperature, time, etc.) for entire process in process chart or production log for all products produced
- PC7.** document and maintain record of batch size, raw material used, yield after each stage of process, wastage, energy utilization and final products produced
- PC8.** maintain record of observations (if any) or deviations related to production and process parameters
- PC9.** load the production plan and process details in ERP for future reference
- PC10.** verify documents and track from finished product to ingredients, in case of quality concerns and for quality management system audits

### *Document and maintain record of finished products ( for production of biscuits In industrial units)*

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

- PC11.** document and maintain record of finished products details such as type of products produced, quantity produced per batch, quantity produced in each type of product, batch number, time of packing, date of manufacture, date of expiry, other label details, primary ,secondary and tertiary packaging materials for all finished products, storage conditions, etc. as per organizational standards
- PC12.** maintain record of observations or deviations (if any) related to finished products
- PC13.** load the details of finished products in ERP for future reference

## Qualification Pack

- PC14.** verify the documents and track from finished product to raw materials, in case of quality concerns and for quality management system audits

### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** organization standards, process standards and procedures followed in the organization
- KU2.** types of products produced by the organization
- KU3.** code of business conduct
- KU4.** dress code to be followed
- KU5.** job responsibilities/duties and standard operating procedures
- KU6.** internal processes such as procurement, store management, inventory management, quality management and key contact points for query resolution
- KU7.** provision of wages, working hours as per organisation policy
- KU8.** food safety and hygiene standards followed
- KU9.** documentation system followed in the organization such as production chart, process chart and finished products chart
- KU10.** details of raw materials and finished products to be recorded
- KU11.** details of production and process parameters to be recorded and maintained
- KU12.** methods to document and maintain records of observations (if any) related to raw materials, process and finished products
- KU13.** methods to track back the record from finished product to raw material
- KU14.** basic computer knowledge
- KU15.** entering the details in erp system followed by the organization

### Generic Skills (GS)

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

- GS1.** note the information communicated by the supervisor
- GS2.** note the raw materials used for production and the finished products produced
- GS3.** note the readings of the process parameters and provide necessary information to fill the process chart
- GS4.** note down observations (if any) related to the process
- GS5.** write information documents to internal departments/ internal teams
- GS6.** note down the data for ERP or as required by the organization
- GS7.** read and interpret the process required for producing various types of products
- GS8.** read and interpret and process flowchart for all products produced
- GS9.** read equipment manuals and process documents to understand the equipment operation and process requirement
- GS10.** read internal information documents sent by internal teams
- GS11.** discuss task lists, schedules and activities with the supervisor

## Qualification Pack

- GS12.** effectively communicate with the team members
- GS13.** question the supervisor in order to understand the nature of the problem and to clarify queries
- GS14.** attentively listen and comprehend the information given by the speaker
- GS15.** communicate clearly with the supervisor and cross department team on the issues faced
- GS16.** analyse critical points in day to day tasks through experience and observation and identify control measures to solve the issue
- GS17.** handle issues in case the supervisor is not available (as per the authority matrix defined by the organization)
- GS18.** plan and organize the work order and jobs received from the supervisor
- GS19.** organize raw materials and packaging materials required for all products following the instruction provided by the supervisor
- GS20.** plan and prioritize the work based on the instructions received from the supervisor
- GS21.** plan to utilise time and equipment's effectively
- GS22.** organize all process/ equipment manuals so as to access information easily
- GS23.** support the supervisor in scheduling tasks for helper(s)
- GS24.** understand customer requirements and their priority and respond as per their needs
- GS25.** supervisor in solving problems by detailing out problems
- GS26.** the possible solutions with the supervisor for problem solving
- GS27.** apply domain information about maintenance processes and technical knowledge about tools and equipment
- GS28.** use common sense and make judgments on day to day basis
- GS29.** use reasoning skills to identify and resolve basic problems
- GS30.** use intuition to detect any potential problems which could arise during operations
- GS31.** use acquired knowledge of the process for identifying and handling issues

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Document and maintain record of raw material ( for production of biscuits in industrial units)</i>	<b>15</b>	<b>10</b>	-	-
<b>PC1.</b> document and maintain record of all raw materials used for making biscuits such as name of raw materials, supplier details, batch number, receiving date/ date of manufacture, expiry date, supplier quality document, quality parameters of all raw materials, internal quality analysis report, etc. as per organizational standards	6	4	-	-
<b>PC2.</b> maintain record of observations (if any) related to raw materials	3	2	-	-
<b>PC3.</b> load the raw materials details in erp for future reference	3	2	-	-
<b>PC4.</b> verify the documents and track from finished product to raw materials, in case of quality concerns and during quality management system audit	3	2	-	-
<i>Document and maintain record of production schedule and process parameters ( for production of biscuits in industrial units)</i>	<b>30</b>	<b>20</b>	-	-
<b>PC5.</b> document and maintain record of production details such as the product produced, production sequence, equipments and machinery details, efficiency and capacity utilization of equipment	6	4	-	-
<b>PC6.</b> document and maintain record of process details such as type of raw material used, type of dough, process parameters ( temperature, time, etc.) for entire process in process chart or production log for all products produced	9	6	-	-
<b>PC7.</b> document and maintain record of batch size, raw material used, yield after each stage of process, wastage, energy utilization and final products produced	6	4	-	-
<b>PC8.</b> maintain record of observations (if any) or deviations related to production and process parameters	3	2	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC9.</b> load the production plan and process details in ERP for future reference	3	2	-	-
<b>PC10.</b> verify documents and track from finished product to ingredients, in case of quality concerns and for quality management system audits	3	2	-	-
<i>Document and maintain record of finished products ( for production of biscuits In industrial units)</i>	<b>15</b>	<b>10</b>	-	-
<b>PC11.</b> document and maintain record of finished products details such as type of products produced, quantity produced per batch, quantity produced in each type of product, batch number, time of packing, date of manufacture, date of expiry, other label details, primary ,secondary and tertiary packaging materials for all finished products, storage conditions, etc. as per organizational standards	6	4	-	-
<b>PC12.</b> maintain record of observations or deviations (if any) related to finished products	3	2	-	-
<b>PC13.</b> load the details of finished products in ERP for future reference	3	2	-	-
<b>PC14.</b> verify the documents and track from finished product to raw materials, in case of quality concerns and for quality management system audits	3	2	-	-
<b>NOS Total</b>	<b>60</b>	<b>40</b>	-	-

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	FIC/N5012
<b>NOS Name</b>	Complete documentation and record keeping related to production of biscuits in industrial units
<b>Sector</b>	Food Processing
<b>Sub-Sector</b>	Bread and Bakery
<b>Occupation</b>	Processing
<b>NSQF Level</b>	4
<b>Credits</b>	TBD
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	30/09/2021
<b>Next Review Date</b>	30/09/2024
<b>NSQC Clearance Date</b>	30/09/2021

## Qualification Pack

# FIC/N9001: Ensure food safety, hygiene and sanitation for processing food products

## Description

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

## Elements and Performance Criteria

### *Perform safety and sanitation related functions (for processing food products)*

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

- PC1.** comply with food safety and hygiene procedures followed in the organization
- PC2.** ensure personal hygiene by use of gloves, hairnets, masks, ear plugs, goggles, shoes, etc.
- PC3.** ensure hygienic production of food by inspecting raw materials, ingredients, finished products etc. for compliance to physical, chemical and microbiological parameters
- PC4.** pack products in appropriate packaging materials, label and store them in designated area, free from pests, flies and infestations
- PC5.** clean, maintain and monitor food processing equipment periodically, using it only for the specified purpose
- PC6.** use safety equipment such as fire extinguisher, eye wash unit, first aid kit when required
- PC7.** follow housekeeping practices by having designated area for machines/tools
- PC8.** follow industry standards like GMP, HACCP and product recall process
- 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
- PC10.** Identify, document and report problems such as rodents and pests to management
- PC11.** conduct workplace checklist audit before and after work to ensure safety and hygiene
- PC12.** document and maintain raw material, packaging material, process and finished products for the credibility and effectiveness of the food safety control system

### *Apply food safety practices (for processing food products)*

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

- PC13.** determine the quality of food using criteria such as odour, appearance, taste and best before date, and take immediate measures to prevent spoilage
- PC14.** store raw materials, finished products and allergens separately to prevent cross contamination
- PC15.** label raw materials and finished products and store them in different storage areas according to safe food practices
- PC16.** follow stock rotation based on FEFO/FIFO

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** organization standards, process standards and procedures followed in the organisation

## Qualification Pack

- KU2.** types of products produced by the organisation
- KU3.** code of business conduct
- KU4.** dress code to be followed
- KU5.** job responsibilities/duties and standard operating procedures
- KU6.** internal processes such as procurement, store management, inventory management, quality management and key contact points for query resolution
- KU7.** provision of wages, working hours as per organisation policy
- KU8.** food safety and hygiene standards followed
- KU9.** possible physical, chemical and biological hazards and methods of prevention of various hazards
- KU10.** personal hygiene requirement
- KU11.** different types of sanitizers used for process area, equipment and the procedure to use them
- KU12.** knowledge on food safety standards and regulations (as per fssai)
- KU13.** quality parameters and quality assessment based on physical parameters, basic food microbiology
- KU14.** labelling/marketing requirements for raw materials, finished goods, stored materials, packaging materials and their designated storage area
- KU15.** cleaning and sanitation of equipment and work area
- KU16.** CIP and COP methods and procedures
- KU17.** storage norms for raw materials, packaging material and finished products
- KU18.** stock rotation of ingredients and finished products based on FEFO/FIFO
- KU19.** method of maintaining safety check lists for all machineries
- KU20.** GHP
- KU21.** GMP
- KU22.** HACCP

## Generic Skills (GS)

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

- GS1.** note the information communicated by the supervisor
- GS2.** note the raw materials used for production and the finished products produced
- GS3.** note the readings of the process parameters and provide necessary information to fill the process chart
- GS4.** note down observations (if any) related to the process
- GS5.** write information documents to internal departments/ internal teams
- GS6.** note down the data for online ERP or as per applicability in the organization
- GS7.** read and interpret the process required for producing various types of products
- GS8.** read and interpret and process flowchart for all products produced
- GS9.** read equipment manuals and process documents to understand the equipment operation and process requirement
- GS10.** read internal information documents sent by internal teams



## Qualification Pack

- GS11.** discuss task lists, schedules and activities with the supervisor
- GS12.** effectively communicate with the team members
- GS13.** question the supervisor in order to understand the nature of the problem and to clarify queries
- GS14.** attentively listen and comprehend the information given by the speaker
- GS15.** communicate clearly with the supervisor and cross department teams on the issues faced during process
- GS16.** analyse critical points in day to day tasks through experience and observation and identify control measures to solve the issue
- GS17.** handle issues in case the supervisor is not available (as per the authority matrix defined by the organization)
- GS18.** plan and organize the work order and jobs received from the supervisor
- GS19.** organize raw materials and packaging materials required for all products following the instruction provided by the supervisor
- GS20.** plan and prioritize the work based on the instructions received from the supervisor
- GS21.** plan to utilise time and equipment's effectively
- GS22.** organize all process/ equipment manuals so as to access information easily
- GS23.** support the supervisor in scheduling tasks for helper(s)
- GS24.** understand customer requirements and their priority and respond as per their needs
- GS25.** support supervisor in solving problems by detailing out problems
- GS26.** discuss the possible solutions with the supervisor for problem solving
- GS27.** apply domain information about maintenance processes and technical knowledge about tools and equipment
- GS28.** use common sense and make judgments on day to day basis
- GS29.** use reasoning skills to identify and resolve basic problems
- GS30.** use intuition to detect any potential problems which could arise during operations
- GS31.** use acquired knowledge of the process for identifying and handling issues

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Perform safety and sanitation related functions (for processing food products)</i>	<b>25</b>	<b>50</b>	-	-
<b>PC1.</b> comply with food safety and hygiene procedures followed in the organization	2	3	-	-
<b>PC2.</b> ensure personal hygiene by use of gloves, hairnets, masks, ear plugs, goggles, shoes, etc.	1	5	-	-
<b>PC3.</b> ensure hygienic production of food by inspecting raw materials, ingredients, finished products etc. for compliance to physical, chemical and microbiological parameters	2	3	-	-
<b>PC4.</b> pack products in appropriate packaging materials, label and store them in designated area, free from pests, flies and infestations	4	6	-	-
<b>PC5.</b> clean, maintain and monitor food processing equipment periodically, using it only for the specified purpose	2	3	-	-
<b>PC6.</b> use safety equipment such as fire extinguisher, eye wash unit, first aid kit when required	4	6	-	-
<b>PC7.</b> follow housekeeping practices by having designated area for machines/tools	2	3	-	-
<b>PC8.</b> follow industry standards like GMP, HACCP and product recall process	4	6	-	-
<b>PC9.</b> attend training on hazard management to understand types of hazards such as physical, chemical and biological hazards and measures to control and prevent them	1	4	-	-
<b>PC10.</b> Identify, document and report problems such as rodents and pests to management	1	4	-	-
<b>PC11.</b> conduct workplace checklist audit before and after work to ensure safety and hygiene	1	4	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC12.</b> document and maintain raw material, packaging material, process and finished products for the credibility and effectiveness of the food safety control system	1	3	-	-
<i>Apply food safety practices (for processing food products)</i>	<b>10</b>	<b>15</b>	-	-
<b>PC13.</b> determine the quality of food using criteria such as odour, appearance, taste and best before date, and take immediate measures to prevent spoilage	2	3	-	-
<b>PC14.</b> store raw materials, finished products and allergens separately to prevent cross contamination	2	3	-	-
<b>PC15.</b> label raw materials and finished products and store them in different storage areas according to safe food practices	2	3	-	-
<b>PC16.</b> follow stock rotation based on FEFO/FIFO	4	6	-	-
<b>NOS Total</b>	<b>35</b>	<b>65</b>	-	-

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	FIC/N9001
<b>NOS Name</b>	Ensure food safety, hygiene and sanitation for processing food products
<b>Sector</b>	Food Processing
<b>Sub-Sector</b>	Fruits and Vegetables
<b>Occupation</b>	Generic
<b>NSQF Level</b>	4
<b>Credits</b>	TBD
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	30/09/2021
<b>Next Review Date</b>	30/09/2024
<b>NSQF Clearance Date</b>	30/09/2021

## Qualification Pack

### DGT/VSQ/N0102: Employability Skills (60 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
- Career Development & Goal Setting
- 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.** identify employability skills required for jobs in various industries
- PC2.** identify and explore learning and employability portals

##### *Constitutional values - Citizenship*

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

- PC3.** recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.
- PC4.** follow environmentally sustainable practices

##### *Becoming a Professional in the 21st Century*

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

- PC5.** recognize the significance of 21st Century Skills for employment
- PC6.** practice the 21st Century Skills such as Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life

##### *Basic English Skills*

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

## Qualification Pack

- PC7.** use basic English for everyday conversation in different contexts, in person and over the telephone
- PC8.** read and understand routine information, notes, instructions, mails, letters etc. written in English
- PC9.** write short messages, notes, letters, e-mails etc. in English

### *Career Development & Goal Setting*

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

- PC10.** understand the difference between job and career
- PC11.** prepare a career development plan with short- and long-term goals, based on aptitude

### *Communication Skills*

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

- PC12.** follow verbal and non-verbal communication etiquette and active listening techniques in various settings
- PC13.** work collaboratively with others in a team

### *Diversity & Inclusion*

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

- PC14.** communicate and behave appropriately with all genders and PwD
- PC15.** escalate any issues related to sexual harassment at workplace according to POSH Act

### *Financial and Legal Literacy*

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

- PC16.** select financial institutions, products and services as per requirement
- PC17.** carry out offline and online financial transactions, safely and securely
- PC18.** identify common components of salary and compute income, expenses, taxes, investments etc
- PC19.** identify relevant rights and laws and use legal aids to fight against legal exploitation

### *Essential Digital Skills*

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

- PC20.** operate digital devices and carry out basic internet operations securely and safely
- PC21.** use e- mail and social media platforms and virtual collaboration tools to work effectively
- PC22.** use basic features of word processor, spreadsheets, and presentations

### *Entrepreneurship*

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

- PC23.** identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research
- PC24.** develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion
- PC25.** identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity

### *Customer Service*

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

- PC26.** identify different types of customers
- PC27.** identify and respond to customer requests and needs in a professional manner.

## Qualification Pack

**PC28.** follow appropriate hygiene and grooming standards

*Getting ready for apprenticeship & Jobs*

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

**PC29.** create a professional Curriculum vitae (Résumé)

**PC30.** search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively

**PC31.** apply to identified job openings using offline /online methods as per requirement

**PC32.** answer questions politely, with clarity and confidence, during recruitment and selection

**PC33.** identify apprenticeship opportunities and register for it as per guidelines and requirements

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

**KU1.** need for employability skills and different learning and employability related portals

**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 English language for effective verbal (face to face and telephonic) and written communication in formal and informal set up

**KU6.** importance of career development and setting long- and short-term goals

**KU7.** about effective communication

**KU8.** POSH Act

**KU9.** Gender sensitivity and inclusivity

**KU10.** different types of financial institutes, products, and services

**KU11.** how to compute income and expenditure

**KU12.** importance of maintaining safety and security in offline and online financial transactions

**KU13.** different legal rights and laws

**KU14.** different types of digital devices and the procedure to operate them safely and securely

**KU15.** how to create and operate an e- mail account and use applications such as word processors, spreadsheets etc.

**KU16.** how to identify business opportunities

**KU17.** types and needs of customers

**KU18.** how to apply for a job and prepare for an interview

**KU19.** apprenticeship scheme and the process of registering on apprenticeship portal

## Generic Skills (GS)

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

**GS1.** read and write different types of documents/instructions/correspondence

**GS2.** communicate effectively using appropriate language in formal and informal settings



## Qualification Pack

- GS3.** behave politely and appropriately with all
- GS4.** how to work in a virtual mode
- GS5.** perform calculations efficiently
- GS6.** solve problems effectively
- GS7.** pay attention to details
- GS8.** manage time efficiently
- GS9.** maintain hygiene and sanitization to avoid infection



## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Introduction to Employability Skills</i>	<b>1</b>	<b>1</b>	-	-
<b>PC1.</b> identify employability skills required for jobs in various industries	-	-	-	-
<b>PC2.</b> identify and explore learning and employability portals	-	-	-	-
<i>Constitutional values - Citizenship</i>	<b>1</b>	<b>1</b>	-	-
<b>PC3.</b> recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.	-	-	-	-
<b>PC4.</b> follow environmentally sustainable practices	-	-	-	-
<i>Becoming a Professional in the 21st Century</i>	<b>2</b>	<b>4</b>	-	-
<b>PC5.</b> recognize the significance of 21st Century Skills for employment	-	-	-	-
<b>PC6.</b> practice the 21st Century Skills such as Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life	-	-	-	-
<i>Basic English Skills</i>	<b>2</b>	<b>3</b>	-	-
<b>PC7.</b> use basic English for everyday conversation in different contexts, in person and over the telephone	-	-	-	-
<b>PC8.</b> read and understand routine information, notes, instructions, mails, letters etc. written in English	-	-	-	-
<b>PC9.</b> write short messages, notes, letters, e-mails etc. in English	-	-	-	-
<i>Career Development &amp; Goal Setting</i>	<b>1</b>	<b>2</b>	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC10.</b> understand the difference between job and career	-	-	-	-
<b>PC11.</b> prepare a career development plan with short- and long-term goals, based on aptitude	-	-	-	-
<i>Communication Skills</i>	<b>2</b>	<b>2</b>	-	-
<b>PC12.</b> follow verbal and non-verbal communication etiquette and active listening techniques in various settings	-	-	-	-
<b>PC13.</b> work collaboratively with others in a team	-	-	-	-
<i>Diversity &amp; Inclusion</i>	<b>1</b>	<b>2</b>	-	-
<b>PC14.</b> communicate and behave appropriately with all genders and PwD	-	-	-	-
<b>PC15.</b> escalate any issues related to sexual harassment at workplace according to POSH Act	-	-	-	-
<i>Financial and Legal Literacy</i>	<b>2</b>	<b>3</b>	-	-
<b>PC16.</b> select financial institutions, products and services as per requirement	-	-	-	-
<b>PC17.</b> carry out offline and online financial transactions, safely and securely	-	-	-	-
<b>PC18.</b> identify common components of salary and compute income, expenses, taxes, investments etc	-	-	-	-
<b>PC19.</b> identify relevant rights and laws and use legal aids to fight against legal exploitation	-	-	-	-
<i>Essential Digital Skills</i>	<b>3</b>	<b>4</b>	-	-
<b>PC20.</b> operate digital devices and carry out basic internet operations securely and safely	-	-	-	-
<b>PC21.</b> use e- mail and social media platforms and virtual collaboration tools to work effectively	-	-	-	-
<b>PC22.</b> use basic features of word processor, spreadsheets, and presentations	-	-	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Entrepreneurship</i>	<b>2</b>	<b>3</b>	-	-
<b>PC23.</b> identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research	-	-	-	-
<b>PC24.</b> develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion	-	-	-	-
<b>PC25.</b> identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity	-	-	-	-
<i>Customer Service</i>	<b>1</b>	<b>2</b>	-	-
<b>PC26.</b> identify different types of customers	-	-	-	-
<b>PC27.</b> identify and respond to customer requests and needs in a professional manner.	-	-	-	-
<b>PC28.</b> follow appropriate hygiene and grooming standards	-	-	-	-
<i>Getting ready for apprenticeship &amp; Jobs</i>	<b>2</b>	<b>3</b>	-	-
<b>PC29.</b> create a professional Curriculum vitae (Résumé)	-	-	-	-
<b>PC30.</b> search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively	-	-	-	-
<b>PC31.</b> apply to identified job openings using offline /online methods as per requirement	-	-	-	-
<b>PC32.</b> answer questions politely, with clarity and confidence, during recruitment and selection	-	-	-	-
<b>PC33.</b> identify apprenticeship opportunities and register for it as per guidelines and requirements	-	-	-	-
<b>NOS Total</b>	<b>20</b>	<b>30</b>	-	-

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	DGT/VSQ/N0102
<b>NOS Name</b>	Employability Skills (60 Hours)
<b>Sector</b>	Cross Sectoral
<b>Sub-Sector</b>	Professional Skills
<b>Occupation</b>	Employability
<b>NSQF Level</b>	4
<b>Credits</b>	2
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	23/06/2023
<b>Next Review Date</b>	23/06/2026
<b>NSQC Clearance Date</b>	23/06/2023

## Assessment Guidelines and Assessment Weightage

### Assessment Guidelines

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

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**Minimum Aggregate Passing % at QP Level : 70**

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

## Assessment Weightage

Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
FIC/N5009.Prepare and maintain work area and process machineries for producing biscuits in industrial units	35	65	-	-	100	10
FIC/N5010.Prepare for production of biscuits in industrial units	35	65	-	-	100	20
FIC/N5011.Produce biscuits in industrial units	35	65	-	-	100	35
FIC/N5012.Complete documentation and record keeping related to production of biscuits in industrial units	60	40	-	-	100	10
FIC/N9001.Ensure food safety, hygiene and sanitation for processing food products	35	65	-	-	100	20
DGT/VSQ/N0102.Employability Skills (60 Hours)	20	30	0	0	50	5
<b>Total</b>	<b>220</b>	<b>330</b>	<b>0</b>	<b>0</b>	<b>550</b>	<b>100</b>

## Qualification Pack

### Acronyms

<b>NOS</b>	National Occupational Standard(s)
<b>NSQF</b>	National Skills Qualifications Framework
<b>QP</b>	Qualifications Pack
<b>TVET</b>	Technical and Vocational Education and Training
<b>CIP</b>	Clean In Place
<b>COP</b>	Clean Out Of Place
<b>ERP</b>	Enterprise Resource Planning
<b>FIFO</b>	First In First Out
<b>FEFO</b>	First Expiry First Out
<b>FSSAI</b>	Food Safety and Standards Authority of India
<b>GMP</b>	Good Manufacturing Practices
<b>GHP</b>	Good Hygiene Practices
<b>HACCP</b>	Hazard Analysis and Critical Control Point

## Qualification Pack

### Glossary

<b>Sector</b>	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.
<b>Sub-sector</b>	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
<b>Occupation</b>	Occupation is a set of job roles, which perform similar/ related set of functions in an industry.
<b>Job role</b>	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
<b>Occupational Standards (OS)</b>	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.
<b>Performance Criteria (PC)</b>	Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
<b>National Occupational Standards (NOS)</b>	NOS are occupational standards which apply uniquely in the Indian context.
<b>Qualifications Pack (QP)</b>	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.
<b>Unit Code</b>	Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'
<b>Unit Title</b>	Unit title gives a clear overall statement about what the incumbent should be able to do.
<b>Description</b>	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.
<b>Scope</b>	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.

## Qualification Pack

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