









# Processed Food Entrepreneur

QP Code: FIC/Q9001

Version: 1.0

NSQF Level: 5

Food Industry Capacity & Skill Initiative || Shriram Bharatiya Kala kendra, 3rd floor, 1, Copernicus Marg, Mandi House, New Delhi Delhi 110001







# **Contents**

FIC/Q9001: Processed Food Entrepreneur	
Brief Job Description	3
Applicable National Occupational Standards (NOS)	3
Compulsory NOS	3
Qualification Pack (QP) Parameters	3
FIC/N9005: Evaluate and develop entrepreneur skills	5
FIC/N9006: Selection of product and business planning	11
FIC/N9007: Prepare for start up of food processing unit	17
FIC/N9008: Start food processing unit	24
FIC/N9009: Complete documentation and record keeping related to processed foodentrepreneur	
33	
FIC/N9010: Ensure food safety, hygiene and sanitation	
Assessment Guidelines and Weightage	48
Assessment Guidelines	48
Assessment Weightage	49
Acronyms	
Glossary	51







# FIC/Q9001: Processed Food Entrepreneur

## **Brief Job Description**

A Processed Food Entrepreneur is responsible for starting and managing a food processing organization by exploring the market, identifying opportunities in food processing, innovating, giving a different dimension to product/s, sizing up its value and working towards/making profit.

#### **Personal Attributes**

A Processed Food Entrepreneur must have the ability to plan, organize, prioritize, calculate, take risks, make decisions and handle pressure. The individual must possess reading, writing, communication, analytical, crisis management, networking and marketing skills.

# **Applicable National Occupational Standards (NOS)**

#### **Compulsory NOS:**

- 1. FIC/N9005: Evaluate and develop entrepreneur skills
- 2. FIC/N9006: Selection of product and business planning
- 3. FIC/N9007: Prepare for start up of food processing unit
- 4. FIC/N9008: Start food processing unit
- 5. FIC/N9009: Complete documentation and record keeping related to processed foodentrepreneur
- 6. FIC/N9010: Ensure food safety, hygiene and sanitation

# **Qualification Pack (QP) Parameters**

Sector	Food Processing
Sub-Sector	Fruits and Vegetables, Food Grain Milling, Dairy Products, Meat and Poultry, Fish and Sea Food, Bread and Bakery, Alcoholic Beverages, Aerated Water/Soft Drinks, Soya Food, Packaged Foods
Occupation	Processing
Country	India
NSQF Level	5







Aligned to NCO/ISCO/ISIC Code	NCO-2004/NIL
Minimum Educational Qualification & Experience	8th Class (Preferably) with 0-6 Months of experience a similar role
Minimum Level of Education for Training in School	8th Class
Pre-Requisite License or Training	1. Food laws and regulations2. Basic accounting
Minimum Job Entry Age	18 Years
Last Reviewed On	23/02/2017
Next Review Date	31/03/2022
Deactivation Date	31/03/2022
NSQC Approval Date	03/08/2018
Version	1.0
Reference code on NQR	2018/FI/FICSI/02466
NQR Version	1.0







# FIC/N9005: Evaluate and develop entrepreneur skills

# **Description**

This OS unit is about evaluating and developing entrepreneur skills before starting a food processing unit

#### **Elements and Performance Criteria**

#### Evaluate before starting foodprocessing unit

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

- **PC1.** self evaluate on the capability to start usiness, develop business, manage an organization, manage time, handle ifferent people (customers, vendors, government officials, bankers, onsultants, etc),make independent and clear decisions under pressure, physical and emotional stamina work long hours
- **PC2.** evaluate the performance of various food processing sectors and sale/market share of various category of processed foods, to decide on starting the food processing sector and food product
- **PC3.** choose the right product based on trengths, potential, capability, market demand, profitability, personal preferences
- **PC4.** conduct market survey to understand the market trend,market needs, opportunity, competition
- **PC5.** review market demand based on ompetitors, customers, market requirement, current market status etc
- **PC6.** consult with experts, experienced people and family on the ideas developed

#### Develop Entrepreneur Skills

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

- **PC7.** acquire knowledge (through training or other sources like reading books) on communication skills, management skills, accounting skills, marketing skills
- **PC8.** develop / acquire technical skills (through training or through work experience) on raw materials handling product processing, productpreservation, packaging ,quality control, roduct storage, processing machineries, relevant food laws and regulations, food safety hygiene and sanitation
- **PC9.** develop skills on distribution, sales and marketing (through training or discussing and learning from experienced people)
- **PC10.** learn to be realistic and objective while planning business, and discrete in sharing the ideas
- **PC11.** acquire knowledge (through training or other sources like reading books) on communication skills, management skills, accounting skills,marketing skills

#### **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** relevant organisational standards, process standards and procedures required for the food processing unit
- **KU2.** performance evaluation of food processing units







- **KU3.** decision making on products to be produced in the organisation
- **KU4.** methods and importance of market survey
- KU5. understanding market demand
- **KU6.** methods and importance of consulting with experts
- KU7. various food processing industries, market trend and market share of various processed food
- **KU8.** technical requirement for food processing sector like raw materials, packaging materials, process etc
- **KU9.** food processing machineries
- **KU10.** quality requirement for food
- KU11. food laws and regulations
- KU12. food safety and hygiene
- **KU13.** good manufacturing practice (GMP)
- **KU14.** hazard analysis and critical control point (HACCP)

# **Generic Skills (GS)**

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

- **GS1.** note thet information to be communicated
- **GS2.** fill relevant applications required for food processing units
- **GS3.** note the information required for establishing and operating food processing unit
- **GS4.** document the process, process equipments and parameters for products processed
- **GS5.** record the raw materials, finished products produced, inventory, stock distribution, marketing and sales
- **GS6.** note down observations (if any) related to the process or organisation
- **GS7.** write communications to government officials, financial institutions and employees
- **GS8.** note down the data for erp or as required by the organization
- **GS9.** read communications from various government departments
- **GS10.** read and interpret and process flowchart and process required for all products produced
- **GS11.** read internal communications from the employees
- **GS12.** read communications from market, various trade related organisations
- GS13. discuss task lists, schedules and activities with the employees
- **GS14.** effectively communicate with the employees
- **GS15.** question the employees in order to understand the nature of the problem and to clarify queries
- **GS16.** attentively listen and comprehend the information given by the speaker
- **GS17.** communicate clearly with the employees to understand and resolve issues
- **GS18.** communicate clearly with the vendors, government officials, bankers, employees, customers, consumers etc with respect to organisation, process, product, sales etc
- **GS19.** analyse critical points in day to day tasks through experience and observation and identify control measures to solve the issue







- **GS20.** handle and resolve issues related to entire operation, in case of issues beyond the capability of the employees
- **GS21.** plan and organize the work
- GS22. plan and allot work/responsibilities to the employees
- **GS23.** organize raw materials and packaging materials required for all products produced in the organisation
- **GS24.** plan to prioritize work based on organisational needs
- **GS25.** plan to prioritize the work based on the order/market requirement
- **GS26.** plan to utilize the time and equipments effectively
- **GS27.** plan to utilise the time effectively
- **GS28.** support the employees in their tasks to achieve production and sales
- **GS29.** understand customer requirements and their priority and respond as per their needs
- **GS30.** support employees in solving problems by understanding the problems
- **GS31.** arrive at possible solution for problems related to operation, by discussing with experienced/concerned people
- **GS32.** apply domain information about maintenance processes and technical knowledge about tools and equipment
- **GS33.** use common sense and make judgments on day to day basis
- **GS34.** use reasoning skills to identify and resolve basic problems
- **GS35.** use intuition to detect any potential problems which could arise during operations
- **GS36.** use acquired knowledge of the process for identifying and handling issues







# **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Evaluate before starting foodprocessing unit	19	41	-	-
<b>PC1.</b> self evaluate on the capability to start usiness, develop business, manage an organization, manage time, handle ifferent people (customers, vendors, government officials, bankers, onsultants, etc),make independent and clear decisions under pressure, physical and emotional stamina work long hours	5	10	-	-
<b>PC2.</b> evaluate the performance of various food processing sectors and sale/market share of various category of processed foods, to decide on starting the food processing sector and food product	3	7	-	-
<b>PC3.</b> choose the right product based on trengths,potential,capability, market demand,profitability,personal preferences	3	7	-	-
<b>PC4.</b> conduct market survey to understand the market trend,market needs, opportunity, competition	3	7	-	-
<b>PC5.</b> review market demand based on ompetitors, customers, market requirement, current market status etc	3	7	-	-
<b>PC6.</b> consult with experts, experienced people and family on the ideas developed	2	3	-	-
Develop Entrepreneur Skills	16	24	-	-
<b>PC7.</b> acquire knowledge (through training or other sources like reading books) on communication skills, management skills, accounting skills, marketing skills	4	6	-	-
PC8. develop / acquire technical skills (through training or through work experience) on raw materials handling product processing, productpreservation, packaging ,quality control, roduct storage, processing machineries, relevant food laws and regulations, food safety hygiene and sanitation	4	6	-	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC9.</b> develop skills on distribution, sales and marketing (through training or discussing and learning from experienced people)	4	6	-	-
<b>PC10.</b> learn to be realistic and objective while planning business, and discrete in sharing the ideas	2	3	-	-
<b>PC11.</b> acquire knowledge (through training or other sources like reading books) on communication skills, management skills, accounting skills,marketing skills	2	3	-	-
NOS Total	35	65	-	-







# **National Occupational Standards (NOS) Parameters**

NOS Code	FIC/N9005
NOS Name	Evaluate and develop entrepreneur skills
Sector	Food Processing
Sub-Sector	Fruits and Vegetables, Food Grain Milling, Dairy Products, Meat and Poultry, Fish and Sea Food, Bread and Bakery, Alcoholic Beverages, Aerated Water/Soft Drinks, Soya Food, Packaged Foods
Occupation	Processing
NSQF Level	5
Credits	TBD
Version	1.0
Last Reviewed Date	30/09/2021
Next Review Date	29/06/2024
<b>Deactivation Date</b>	29/06/2024
NSQC Clearance Date	30/09/2021







# FIC/N9006: Selection of product and business planning

# **Description**

This OS unit is on selection of product and business planning through evaluation of various products, process capability and arket demand, selecting brand name, designing packaging material and fixing product cost, before starting a food processing unit

# Scope

This unit/task covers the following:

#### **Elements and Performance Criteria**

#### Identification and selection of product

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

- **PC1.** evaluate and identify product(s) based on idea, market demand, competition, availability of raw material, process capability, export potential
- **PC2.** evaluate the production/process capabilities for the identified product(s) based on requirements like, technology (technology transfer from institutes/import technologies), investment, processing area ,machineries,labour (skilled or unskilled), utilities (water, electricity etc), special regulations (on environment, pollution control etc)
- **PC3.** conduct market survey on identified product(s) to understand market share, demand for product, competitors strength and weakness, competitors business growth, possible share in the market, ompetitors marketing/sale techniques
- **PC4.** decide on the product based on the production feasibility and market demand, for starting the food processing unit
- **PC5.** produce small quantity (trial production) of product in home kitchen or in incubation centre (if possible) to check the process feasibility
- **PC6.** test market the product to know the market response

#### Developing business plan

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

- **PC7.** select suitable brand name for the product such that it is meaningful, memorable, likeable, transferable (to category extension), protectable (legally)
- **PC8.** design attractive, unique and eye-catching packaging to present it in an attractive manner
- **PC9.** fix right selling price based on production cost, current sales price of similar product in the market, competitor price, quality of product produced against competitors product
- **PC10.** plan to produce and sell quality product all time
- **PC11.** work out clear business goal and set timeline to accomplish the goal
- **PC12.** plan to start small processing unit with minimum investment and grow slowly with the market

# **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:







- **KU1.** relevant organisational standards, process standards and procedures required for the food processing unit
- **KU2.** methods to evaluate and identify food products to be produced in the organisation
- **KU3.** methods ot evaluate process requirement and process capability for the organisation
- **KU4.** methods and importance of market survey
- **KU5.** understanding market demand
- **KU6.** methods and importance of consulting with experts
- **KU7.** various processed food products in market
- **KU8.** process methods for producing product
- **KU9.** machineries required for production of various products
- **KU10.** methods to conduct market survey
- **KU11.** branding and costing
- KU12. market trend and market share of various processed food
- **KU13.** quality requirements for food
- **KU14.** food laws and regulations
- KU15. food safety and hygiene
- **KU16.** good manufacturing practice (GMP)
- **KU17.** hazard analysis and critical control point (HACCP)

## **Generic Skills (GS)**

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

- **GS1.** note that information to be communicated
- **GS2.** fill relevant applications required for food processing units
- **GS3.** note the information required for establishing and operating food processing unit
- **GS4.** document the process, process equipments and parameters for products processed
- **GS5.** record the raw materials, finished products produced, inventory, stock distribution, marketing and sales
- **GS6.** note down observations (if any) related to the process or organisation
- **GS7.** write communications to government officials, financial institutions and employees
- **GS8.** note down the data for erp or as required by the organization
- **GS9.** read communications from various government departments
- **GS10.** read and interpret and process flowchart and process required for all products produced
- **GS11.** read internal communications from the employees
- **GS12.** read communications from market, various trade related organisations
- **GS13.** discuss task lists, schedules and activities with the employees
- **GS14.** effectively communicate with the employees
- **GS15.** question the employees in order to understand the nature of the problem and to clarify queries
- **GS16.** attentively listen and comprehend the information given by the speaker







- **GS17.** communicate clearly with the employees to understand and resolve issues
- **GS18.** communicate clearly with the vendors, government officials, bankers, employees, customers, consumers etc with respect to organisation, process, product, sales etc
- **GS19.** analyse critical points in day to day tasks through experience and observation and identify control measures to solve the issue
- **GS20.** handle and resolve issues related to entire operation, in case of issues beyond the capability of the employees
- **GS21.** plan and organize the work
- GS22. plan and allot work/responsibilities to the employees
- **GS23.** organize raw materials and packaging materials required for all products produced in the organisation
- **GS24.** plan to prioritize work based on organisational needs
- GS25. plan to prioritize the work based on the order/market requirement
- **GS26.** plan to utilize the time and equipments effectively
- **GS27.** plan to utilise the time effectively
- **GS28.** support the employees in their tasks to achieve production and sales
- **GS29.** understand customer requirements and their priority and respond as per their needs
- **GS30.** support employees in solving problems by understanding the problems
- **GS31.** arrive at possible solution for problems related to operation, by discussing with experienced/concerned people
- **GS32.** apply domain information about maintenance processes and technical knowledge about tools and equipment
- **GS33.** use common sense and make judgments on day to day basis
- **GS34.** use reasoning skills to identify and resolve basic problems
- **GS35.** use intuition to detect any potential problems which could arise during operations
- **GS36.** use acquired knowledge of the process for identifying and handling issues







# **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Identification and selection of product	17	33	-	-
<b>PC1.</b> evaluate and identify product(s) based on idea, market demand, competition, availability of raw material, process capability, export potential	2	3	-	-
PC2. evaluate the production/process capabilities for the identified product(s) based on requirements like, technology (technology transfer from institutes/import technologies), investment, processing area ,machineries,labour (skilled or unskilled), utilities (water, electricity etc), special regulations (on environment, pollution control etc)	3	7	-	-
<b>PC3.</b> conduct market survey on identified product(s) to understand market share, demand for product, competitors strength and weakness, competitors business growth,possible share in the market, ompetitors marketing/sale techniques	3	7	-	-
<b>PC4.</b> decide on the product based on the production feasibility and market demand, for starting the food processing unit	2	3	-	-
<b>PC5.</b> produce small quantity (trial production) of product in home kitchen or in incubation centre (if possible) to check the process feasibility	4	6	-	-
<b>PC6.</b> test market the product to know the market response	3	7	-	-
Developing business plan	18	32	-	-
<b>PC7.</b> select suitable brand name for the product such that it is meaningful, memorable, likeable, transferable (to category extension), protectable (legally)	3	7	-	-
<b>PC8.</b> design attractive, unique and eye-catching packaging to present it in an attractive manner	3	7	-	-
<b>PC9.</b> fix right selling price based on production cost, current sales price of similar product in the market, competitor price, quality of product produced against competitors product	3	7	-	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC10.</b> plan to produce and sell quality product all time	2	3	-	-
<b>PC11.</b> work out clear business goal and set timeline to accomplish the goal	4	6	-	-
<b>PC12.</b> plan to start small processing unit with minimum investment and grow slowly with the market	3	2	-	-
NOS Total	35	65	-	-







# **National Occupational Standards (NOS) Parameters**

NOS Code	FIC/N9006
NOS Name	Selection of product and business planning
Sector	Food Processing
Sub-Sector	Fruits and Vegetables, Food Grain Milling, Dairy Products, Meat and Poultry, Fish and Sea Food, Bread and Bakery, Alcoholic Beverages, Aerated Water/Soft Drinks, Soya Food, Packaged Foods
Occupation	Processing
NSQF Level	5
Credits	TBD
Version	1.0
Last Reviewed Date	23/02/2017
Next Review Date	31/03/2022
<b>Deactivation Date</b>	31/03/2022
NSQC Clearance Date	03/08/2018







# FIC/N9007: Prepare for start up of food processing unit

# **Description**

This OS unit is about preparation for start up of food processing unit by deciding on location, arranging loan from various financial institutions and filing of entrepreneursmemorandum

# Scope

This unit/task covers the following:

#### **Elements and Performance Criteria**

#### Decide unit location

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

- **PC1.** identify location for starting food processing unit
- **PC2.** select location for food processing unit based on raw materials availability and availabilities of utilities like (water, electricity, communication), accessibility tomain road/areas, proper environmental surroundings etc

#### Arrange finance

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

- **PC3.** secure funds from family, friends and financial institutions
- **PC4.** evaluate financial support suitable for starting food processing unit, like seed capital/marginal money, risk capital, bridge loans, short term for working capital, long and medium term loans
- PC5. approach financial institutions (listed below are few indicative financial institutions and there are many others) for financial assistance to start small, medium and large scale food processing unit commercial/regional rural/co-operative banks which provide short term loans and term loans SIDBI: small industries development bank of india (refinance and direct lending) which provide long and medium term loans SFCS/SIDCS: state financial corporations / state industrial development corporations which provide long and medium term loans NABARD: national bank for agriculture and rural development which provide long, medium and short term loans
- **PC6.** apply for long and medium term loans to purchase land, construct factory building/shed and to purchase machineries and equipments
- **PC7.** apply for short-term loans to meet the working capital requirements like purchase of raw materials and consumables, payment of wages and other immediate manufacturing and administrative expenses
- **PC8.** apply for composite loan and term loan for working capital
- **PC9.** apply for loans in the financial institutions and commercial banks by submitting formal application along with following documents (as applicable) loan application (duly filled) balance sheet and profit loss statement for last three consecutive years of firms owned by promoters income tax assessment certificates of partners/directors proof of possession of land/building architects estimate for construction cost partnership deed/memorandum and articles of associations of company project report budgetary quotations of plant and machinery







- **PC10.** receive response (sanction or rejection) letter for loan application from financial institutions
- **PC11.** on receiving loan sanction letter visit the financial institute and indicate in writing the acceptance of terms and conditions
- **PC12.** obtain approved loan on phased implementation of project
- **PC13.** on rejection of loan from government owned financial institutions and commercial banks, consider taking loans from non-government finance companies or get venture capital investment
- **PC14.** for venture capital investment, prepare a formal business plan (take professional help, if required) with clarity on the deal explaining the need for funds, plans on spending the investment and details on returns/share to the investor, then apply/approach the investor with relevant experience and through connection and by proving as a performer

#### Filing of entrepreneurs memorandum

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

- **PC15.** decide on the type of ownership like sole proprietorship /family ownership / /partnership
- PC16. register the organisation i.e. file the memorandum through following steps download form (part i) of the entrepreneurs memorandum from the internet (website: http://www.dcmsme.gov.in/howtosetup/amendedformatfortheem%282009%2 9.pdf) or obtain the hard copies of the same from the district industries centre, file the memorandum of micro, small or medium enterprise (as the case may be with district industries centre of its area (either in person or online) to establish a micro, small or medium food processing enterprise receive acknowledgement form with the allotted em number, date of issue and category of the unit from district industries centre by post file part ii of the entrepreneurs memorandum to district industries centre on starting production (file part ii within two years of filing to avoid invalidity of part i) inform the district industries centre in writing of any change in the investment in plant and machinery or in equipment within one month of the change in investment

### **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** relevant organisational standards, process standards and procedures required for the food processing unit
- **KU2.** registrations and approvals required for starting food processing organisation
- **KU3.** organising utilities and raw materials for food processing unit
- **KU4.** managing finance requirements for the organisation
- **KU5.** methods to identify location for food processing unit
- **KU6.** various types of loans
- **KU7.** various financial institutions providing loan
- **KU8.** types of loans provided by each financial institutions
- **KU9.** process for applying loan
- **KU10.** procedure to file entrepreneurs memorandum
- **KU11.** mathematical ability
- **KU12.** communication and social skills
- **KU13.** food laws and regulations







- KU14. food safety and hygiene
- **KU15.** good manufacturing practice (GMP)
- KU16. hazard analysis and critical control point (HACCP)

## **Generic Skills (GS)**

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

- **GS1.** note thet information to be communicated
- **GS2.** fill relevant applications required for food processing units
- **GS3.** note the information required for establishing and operating food processing unit
- **GS4.** document the process, process equipments and parameters for products processed
- **GS5.** record the raw materials, finished products produced, inventory, stock distribution, marketing and sales
- **GS6.** note down observations (if any) related to the process or organisation
- **GS7.** write communications to government officials, financial institutions and employees
- **GS8.** note down the data for erp or as required by the organization
- **GS9.** read communications from various government departments
- **GS10.** read and interpret and process flowchart and process required for all products produced
- **GS11.** read internal communications from the employees
- **GS12.** read communications from market, various trade related organisations
- **GS13.** discuss task lists, schedules and activities with the employees
- **GS14.** effectively communicate with the employees
- **GS15.** question the employees in order to understand the nature of the problem and to clarify queries
- **GS16.** attentively listen and comprehend the information given by the speaker
- **GS17.** communicate clearly with the employees to understand and resolve issues
- **GS18.** communicate clearly with the vendors, government officials, bankers, employees, customers, consumers etc with respect to organisation, process, product, sales etc
- **GS19.** analyse critical points in day to day tasks through experience and observation and identify control measures to solve the issue
- **GS20.** handle and resolve issues related to entire operation, in case of issues beyond the capability of the employees
- **GS21.** plan and organize the work
- **GS22.** plan and allot work/responsibilities to the employees
- **GS23.** organize raw materials and packaging materials required for all products produced in the organisation
- **GS24.** plan to prioritize work based on organisational needs
- **GS25.** plan to prioritize the work based on the order/market requirement
- **GS26.** plan to utilize the time and equipments effectively
- **GS27.** plan to utilise the time effectively
- GS28. support the employees in their tasks to achieve production and sales







- **GS29.** understand customer requirements and their priority and respond as per their needs
- **GS30.** support employees in solving problems by understanding the problems
- **GS31.** arrive at possible solution for problems related to operation, by discussing with experienced/concerned people
- **GS32.** apply domain information about maintenance processes and technical knowledge about tools and equipment
- **GS33.** use common sense and make judgments on day to day basis
- **GS34.** use reasoning skills to identify and resolve basic problems
- **GS35.** use intuition to detect any potential problems which could arise during operations
- **GS36.** use acquired knowledge of the process for identifying and handling issues







# **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Decide unit location	4	6	-	-
PC1. identify location for starting food processing unit	2	3	-	-
PC2. select location for food processing unit based on raw materials availability and availabilities of utilities like (water, electricity, communication), accessibility tomain road/areas, proper environmental surroundings etc	2	3	-	-
Arrange finance	24	36	-	-
PC3. secure funds from family, friends and financial institutions	2	3	-	-
<b>PC4.</b> evaluate financial support suitable for starting food processing unit, like seed capital/marginal money, risk capital, bridge loans, short term for working capital, long and medium term loans	2	3	-	-
PC5. approach financial institutions (listed below are few indicative financial institutions and there are many others) for financial assistance to start small, medium and large scale food processing unit commercial/regional rural/cooperative banks which provide short term loans and term loans SIDBI: small industries development bank of india (refinance and direct lending) which provide long and medium term loans SFCS/SIDCS: state financial corporations / state industrial development corporations which provide long and medium term loans NABARD: national bank for agriculture and rural development - which provide long, medium and short term loans	2	3	-	-
<b>PC6.</b> apply for long and medium term loans to purchase land, construct factory building/shed and to purchase machineries and equipments	2	3	-	-
<b>PC7.</b> apply for short-term loans to meet the working capital requirements like purchase of raw materials and consumables, payment of wages and other immediate manufacturing and administrative expenses	2	3	-	-
PC8. apply for composite loan and term loan for working capital	2	3	-	-
PC9. apply for loans in the financial institutions and commercial banks by submitting formal application along with following documents (as applicable) loan application (duly filled) balance sheet and profit loss statement for last three consecutive years of firms owned by promoters income tax assessment certificates of partners/directors proof of possession of land/building architects estimate for construction cost partnership deed/memorandum and articles of associations of company project report budgetary quotations of plant and machinery	2	3	-	-
PC10. receive response (sanction or rejection) letter for loan application from financial institutions	2	3	-	-
PC11. on receiving loan sanction letter visit the financial institute and indicate in writing the acceptance of terms and conditions	2	3	-	-
PC12. obtain approved loan on phased implementation of project	2	3	_	_







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC13.</b> on rejection of loan from government owned financial institutions and commercial banks, consider taking loans from non-government finance companies or get venture capital investment	2	3	-	-
<b>PC14.</b> for venture capital investment, prepare a formal business plan (take professional help, if required) with clarity on the deal explaining the need for funds, plans on spending the investment and details on returns/share to the investor, then apply/approach the investor with relevant experience and through connection and by proving as a performer	2	3	-	-
Filing of entrepreneurs memorandum	7	23	-	-
<b>PC15.</b> decide on the type of ownership like sole proprietorship /family ownership / /partnership	2	3	-	-
PC16. register the organisation i.e. file the memorandum through following steps download form (part i) of the entrepreneurs memorandum from the internet (website: http://www.dcmsme.gov.in/howtosetup/amendedformatfortheem%282009%2 9.pdf) or obtain the hard copies of the same from the district industries centre, file the memorandum of micro, small or medium enterprise (as the case may be with district industries centre of its area (either in person or online) to establish a micro, small or medium food processing enterprise receive acknowledgement form with the allotted em number, date of issue and category of the unit from district industries centre by post file part ii of the entrepreneurs memorandum to district industries centre on starting production (file part ii within two years of filing to avoid invalidity of part i) inform the district industries centre in writing of any change in the investment in plant and machinery or in equipment within one month of the change in investment	5	20	-	-
NOS Total	35	65	-	-







# **National Occupational Standards (NOS) Parameters**

NOS Code	FIC/N9007
NOS Name	Prepare for start up of food processing unit
Sector	Food Processing
Sub-Sector	Fruits and Vegetables, Food Grain Milling, Dairy Products, Meat and Poultry, Fish and Sea Food, Bread and Bakery, Alcoholic Beverages, Aerated Water/Soft Drinks, Soya Food, Packaged Foods
Occupation	Processing
NSQF Level	5
Credits	TBD
Version	1.0
Last Reviewed Date	23/02/2017
Next Review Date	31/03/2022
<b>Deactivation Date</b>	31/03/2022
NSQC Clearance Date	03/08/2018







# FIC/N9008: Start food processing unit

# **Description**

This OS unit is about starting food processing unit through design and construction of processing unit, erection of machineries, recruitment of manpower, obtaining egistrations and licenses, evaluation, production and sale of products

# Scope

This unit/task covers the following:

#### **Elements and Performance Criteria**

#### Set up food processing unit

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

- **PC1.** design the processing unit based on the type of industry through design engineers and plan an appropriate plant layout
- **PC2.** obtain legal licenses required for setting up food processing industry (for sectors where prior approvals are required)
- **PC3.** get the processing unit constructed
- **PC4.** submit necessary applications to relevant government departments (water board, electricity board, department of telecommunications, public work department etc) and obtain utilities like water, power, communication etc
- **PC5.** select and order right machinery and equipments by prior consultation with experts, dealers / suppliers/ manufacturers and users (can take from dic, msme and nsic
- **PC6.** recruit engineers and operators before the installation of the machinery
- PC7. recruit manpower based on manpower and staffing mentioned in the project report

Obtain registration and license, andevaluate food processing unit

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

PC8. obtain necessary registrations and license (as applicable) for starting food processing unit like FSSAI (food safety and standards authority of india) registration or license - registration to be done for food businesses with an annual turnover not exceeding rs 12 lakhs and/or whose, production capacity of food (other than milk and milk products and meat and meat products)does not exceed 100 kg/ltr per day or, procurement or handling and collection of milk is up to 500 litres of milk per day or, slaughtering capacity is 2 large animals or 10 small animals or 50 poultry birds per day or less - license to be obtained for food businesses with an annual turnover exceeding rs 12 lakhs agriculture produce (grading & marking) certification i.e. agmark certification BIS (bureau of indian standards ) license and certification registration under the legal metrology (packaged commodities) rules for importing/ manufacturing/ packing of packaged commodities no objection certificate/consent from state pollution control board/pollution control committee industrial licenses (as applicable) boiler registration and license trademark registration and license registration for warehouse (for cold storage units) licenses/registration under the factories act registration under employees provident fund registration under employees state insurance trade license or trade certificate of enlistments sales tax registration vat registration professional tax







**PC9.** get the unit evaluated to obtain clearance, for statutory or administrative clearance from the regulatory authorities (as applicable) not violating any locational restrictions in force, at the time of evaluation value of plant and machinery is within prescribed limits unit not being owned, controlled or subsidiary of any other industrial undertaking

#### Produce and sell food product

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

- **PC10.** set organizational standards for all materials like raw materials, ingredients, packaging materials etc complying with various regulations in force like regulatory, environmental and certain product specific clearances etc, and prepare standard operating procedures (sop) for purchase, quality control, processing/production, maintenance, storage, logistic, marketing, distribution, waste management etc
- **PC11.** provide training to the employees for handling food processing from purchase of raw material to production and storage of finished products, on standard operating procedures (sop), food hygiene and sanitation, personnel hygiene etc
- **PC12.** plan the materials required for production (like raw materials, ingredients, packaging materials etc considering the expected market demand (plan not to order too much and lock the working capital)
- **PC13.** procure the materials by complying with various regulations in force like regulatory, taxation, environmental and certain product specific clearances etc
- **PC14.** ensure the conformance of purchased materials quality to organisation standards
- **PC15.** carry out trial production and standardise formulation and process parameters
- **PC16.** test the nutritional composition of the product from an accredited laboratory for nutritional information labelling
- **PC17.** carry out commercial production(through trained employees) and produce finished product following the standardised formulations using processing machineries following the standardised process parameters
- **PC18.** pack and label finished product using right packaging material and labelling information, and store as per organisation standards
- **PC19.** clean the machineries and equipments following clean-in-place & cleanout- of-place methods and procedures using recommended cleaning agents and sanitizers as per specifications and standards of the organisation
- **PC20.** check the quality of the product in the internal or external lab to ensure its conformance to specification and standards of the organisation
- **PC21.** follow food hygiene and sanitation in the processing unit for all stages of processing (for handling raw material, process, storage, distribution, facility, personnel etc)
- **PC22.** appoint distributor all over the city/district/state/country (based on marketing and sale) for distribution of products
- **PC23.** manage logistics for distribution of products to the market
- **PC24.** market and sell the product through marketing agency or through appointed sales team
- **PC25.** monitor sale and decide on expansion/decreasing production quantity/halting of the enterprise

#### **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:







- **KU1.** relevant organisational standards, process standards and procedures required for the food processing unit
- **KU2.** types of products produced by the organisation
- **KU3.** overall management of organisation with skills on purchase and inventory management, quality management, storage, distribution, marketing and sales etc
- **KU4.** setting code of business conduct
- **KU5.** dress code to be followed for the type of processing unit
- **KU6.** job responsibilities/duties for all employees in the organisation
- **KU7.** standard operating procedures for activities in all departments like purchase, production, quality, packaging, storage, logistics, distribution, marketing, sales etc
- **KU8.** internal processes like procurement, store management, inventory management, production, quality management, storage, logistics, distribution, marketing and sales, finance and key contact points for query resolution
- **KU9.** provision of wages, working hours to be followed by the organisation
- **KU10.** food safety and hygiene standards to be followed
- **KU11.** design and construction requirements for food processing unit
- KU12. various government departments related to food processing sector
- **KU13.** registration and licenses required for food processing units
- **KU14.** procedures to apply and obtain licenses
- **KU15.** procedures to obtain necessary utilities for the food processing units
- **KU16.** methods to identify and recruit right manpower
- **KU17.** various type of machineries required for the food processing units
- **KU18.** quality parameters, basic food microbiology and quality assessment of food products produced
- **KU19.** storage procedures for raw materials, packaging materials and finished goods
- **KU20.** cleaning procedures like clean-in-place (cip) and clean-out-place (cop)
- **KU21.** knowledge on chemical, disinfectants and sanitizers used in processing units, its handling and storing methods
- **KU22.** types and category of packaging materials, packaging machineries
- **KU23.** food laws and regulations on product, packaging and labelling
- **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 thet information to be communicated
- **GS2.** fill relevant applications required for food processing units
- **GS3.** note the information required for establishing and operating food processing unit
- **GS4.** document the process, process equipments and parameters for products processed







- **GS5.** record the raw materials, finished products produced, inventory, stock distribution, marketing and sales
- **GS6.** note down observations (if any) related to the process or organisation
- **GS7.** write communications to government officials, financial institutions and employees
- **GS8.** note down the data for erp or as required by the organization
- **GS9.** read communications from various government departments
- **GS10.** read and interpret and process flowchart and process required for all products produced
- **GS11.** read internal communications from the employees
- **GS12.** read communications from market, various trade related organisations
- **GS13.** discuss task lists, schedules and activities with the employees
- **GS14.** effectively communicate with the employees
- **GS15.** question the employees in order to understand the nature of the problem and to clarify queries
- **GS16.** attentively listen and comprehend the information given by the speaker
- **GS17.** communicate clearly with the employees to understand and resolve issues
- **GS18.** communicate clearly with the vendors, government officials, bankers, employees, customers, consumers etc with respect to organisation, process, product, sales etc
- **GS19.** analyse critical points in day to day tasks through experience and observation and identify control measures to solve the issue
- **GS20.** handle and resolve issues related to entire operation, in case of issues beyond the capability of the employees
- **GS21.** plan and organize the work
- GS22. plan and allot work/responsibilities to the employees
- **GS23.** organize raw materials and packaging materials required for all products produced in the organisation
- GS24. plan to prioritize work based on organisational needs
- **GS25.** plan to prioritize the work based on the order/market requirement
- **GS26.** plan to utilize the time and equipments effectively
- **GS27.** plan to utilise the time effectively
- **GS28.** support the employees in their tasks to achieve production and sales
- **GS29.** understand customer requirements and their priority and respond as per their needs
- **GS30.** support employees in solving problems by understanding the problems
- **GS31.** arrive at possible solution for problems related to operation, by discussing with experienced/concerned people
- **GS32.** apply domain information about maintenance processes and technical knowledge about tools and equipment
- **GS33.** use common sense and make judgments on day to day basis
- **GS34.** use reasoning skills to identify and resolve basic problems
- **GS35.** use intuition to detect any potential problems which could arise during operations
- **GS36.** use acquired knowledge of the process for identifying and handling issues







# **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Set up food processing unit	8	17	-	-
<b>PC1.</b> design the processing unit based on the type of industry through design engineers and plan an appropriate plant layout	1.5	2.5	-	-
<b>PC2.</b> obtain legal licenses required for setting up food processing industry (for sectors where prior approvals are required)	1.5	2.5	-	-
PC3. get the processing unit constructed	1	2	-	-
<b>PC4.</b> submit necessary applications to relevant government departments (water board, electricity board, department of telecommunications, public work department etc) and obtain utilities like water, power, communication etc	1	2	-	-
<b>PC5.</b> select and order right machinery and equipments by prior consultation with experts, dealers / suppliers/ manufacturers and users (can take from dic, msme and nsic	1	3	-	-
<b>PC6.</b> recruit engineers and operators before the installation of the machinery	1	3	-	-
<b>PC7.</b> recruit manpower based on manpower and staffing mentioned in the project report	1	2	-	-
Obtain registration and license, andevaluate food processing unit	9	16	-	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC8. obtain necessary registrations and license (as applicable) for starting food processing unit like FSSAI (food safety and standards authority of india) registration or license - registration to be done for food businesses with an annual turnover not exceeding rs 12 lakhs and/or whose, production capacity of food (other than milk and milk products and meat and meat products)does not exceed 100 kg/ltr per day or, procurement or handling and collection of milk is up to 500 litres of milk per day or, slaughtering capacity is 2 large animals or 10 small animals or 50 poultry birds per day or less - license to be obtained for food businesses with an annual turnover exceeding rs 12 lakhs agriculture produce (grading & marking) certification i.e. agmark certification BIS (bureau of indian standards ) license and certification registration under the legal metrology (packaged commodities) rules for importing/ manufacturing/ packing of packaged commodities no objection certificate/consent from state pollution control board/pollution control committee industrial licenses (as applicable) boiler registration and license trademark registration and license registration under the factories act registration under employees provident fund registration under employees state insurance trade license or trade certificate of enlistments sales tax registration vat registration professional tax	5	10	-	-
<b>PC9.</b> get the unit evaluated to obtain clearance, for statutory or administrative clearance from the regulatory authorities (as applicable) not violating any locational restrictions in force, at the time of evaluation value of plant and machinery is within prescribed limits unit not being owned, controlled or subsidiary of any other industrial undertaking	4	6	-	-
Produce and sell food product	18	32	-	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC10.</b> set organizational standards for all materials like raw materials, ingredients, packaging materials etc complying with various regulations in force like regulatory, environmental and certain product specific clearances etc, and prepare standard operating procedures (sop) for purchase, quality control, processing/production, maintenance, storage, logistic, marketing, distribution, waste management etc	1	2	-	-
<b>PC11.</b> provide training to the employees for handling food processing from purchase of raw material to production and storage of finished products, on standard operating procedures (sop), food hygiene and sanitation, personnel hygiene etc	1	2	-	-
<b>PC12.</b> plan the materials required for production (like raw materials, ingredients, packaging materials etc considering the expected market demand (plan not to order too much and lock the working capital)	1	1	-	-
<b>PC13.</b> procure the materials by complying with various regulations in force like regulatory, taxation, environmental and certain product specific clearances etc	1	2	-	-
<b>PC14.</b> ensure the conformance of purchased materials quality to organisation standards	1	1	-	-
<b>PC15.</b> carry out trial production and standardise formulation and process parameters	1	3	-	-
<b>PC16.</b> test the nutritional composition of the product from an accredited laboratory for nutritional information labelling	1	1	-	-
<b>PC17.</b> carry out commercial production(through trained employees) and produce finished product following the standardised formulations using processing machineries following the standardised process parameters	1	3	-	-
<b>PC18.</b> pack and label finished product using right packaging material and labelling information, and store as per organisation standards	1	2	-	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC19.</b> clean the machineries and equipments following clean-in-place & cleanout- of-place methods and procedures using recommended cleaning agents and sanitizers as per specifications and standards of the organisation	1	2	-	-
<b>PC20.</b> check the quality of the product in the internal or external lab to ensure its conformance to specification and standards of the organisation	1	2	-	-
<b>PC21.</b> follow food hygiene and sanitation in the processing unit for all stages of processing (for handling raw material, process, storage, distribution, facility, personnel etc)	1	1	-	-
PC22. appoint distributor all over the city/district/state/country (based on marketing and sale) for distribution of products	1.5	2.5	-	-
<b>PC23.</b> manage logistics for distribution of products to the market	1.5	2.5	-	-
<b>PC24.</b> market and sell the product through marketing agency or through appointed sales team	1.5	2.5	-	-
PC25. monitor sale and decide on expansion/decreasing production quantity/halting of the enterprise	1.5	2.5	-	-
NOS Total	35	65	-	-







# **National Occupational Standards (NOS) Parameters**

NOS Code	FIC/N9008
NOS Name	Start food processing unit
Sector	Food Processing
Sub-Sector	Fruits and Vegetables, Food Grain Milling, Dairy Products, Meat and Poultry, Fish and Sea Food, Bread and Bakery, Alcoholic Beverages, Aerated Water/Soft Drinks, Soya Food, Packaged Foods
Occupation	Processing
NSQF Level	5
Credits	TBD
Version	1.0
Last Reviewed Date	23/02/2017
Next Review Date	31/03/2022
<b>Deactivation Date</b>	31/03/2022
NSQC Clearance Date	03/08/2018







# FIC/N9009: Complete documentation and record keeping related to processed foodentrepreneur

# **Description**

This OS unit is about Documenting and maintaining records on organisation, raw materials, machineries, production, storage, distribution, marketing and sale

# Scope

This unit/task covers the following:

#### **Elements and Performance Criteria**

#### Document and maintain records on organization

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

- **PC1.** document and maintain records on organisation layout like blueprint the food processing unit, interior and exterior design of the food processing unit
- **PC2.** document and maintain records on processing machinery, movable andimmovable assets of the food processing unit
- **PC3.** document and maintain records on personal and health records, on each employees employed in the food processing unit
- **PC4.** document and maintain records on accounts records on loans, income, expenses, profit/loss etc of the organisation

#### Document and maintain records on raw materials and machineries

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

- **PC5.** document and maintain records on all raw materials, ingredients and packaging materials handled
- **PC6.** document and maintain records on all raw materials, ingredients and packaging materials handled, like name of the supplier, batch details, quantity supplied and quality of the materials supplies etc
- **PC7.** document and maintain records on all machineries, equipments and tools installed/used in the processing unit, quotations, invoice, supplier/manufacturer details, manuals of all machineries / quipments, annual maintenance details etc
- **PC8.** document and maintaining records on maintenance of each machinery/equipment, machine utilization, machine performance, breakdown details, corrective actions, spares changed, machine/equipment condition etc

#### Document and maintain records on production, quality, storage and distribution

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

**PC9.** document and maintain records on production details like types of products produced, quantity produced, batch number, date of manufacture, date of expiry, raw materials used for producing the batch, and packaging details like type of packaging materials used, category of packaging etc







- **PC10.** document and maintain records on supplier quality report on raw materials, ingredients, packaging materials, internal and external quality report on finished products, consumer and customer complaints, corrective actions, legal documents (if any)
- **PC11.** document and maintain records on production details raw material/packaging materials used with batch and supplier details, production quantity, process parameters, process time, down time, production yield, machineries used for processing and its capacity utilization.
- **PC12.** document and maintain records on inventory of raw materials, machineries/ equipments/ tools, packaging materials, finished products, consumables, utilities etc
- **PC13.** document and maintain records on the storage of finished products like quantity stored, quality of stock saleable or to be disposed), condition of stock (like packaging condition / rework /repack required)
- **PC14.** document and maintain records on storage facility, like condition of storage facility, storage parameters if any like temperature, humidity, pressure (as applicable), space utilised, stacking procedure etc
- **PC15.** document and maintain records on distribution details like transport details, quality, hygiene and cleanliness of vehicle, quantity loaded in the vehicle, distribution routes, outlet details, customer/ consumer details, distribution quantity, quantity returned etc.

#### Document and maintain records on marketing and sales

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

- **PC16.** document and maintain records on marketing schemes, like discounts, free samples given, customer/consumer details, quantity marketed, outcome of marketing on special schemes etc
- **PC17.** document and maintain records on sale like customer details, customer type, ocation, quantity purchased by each utlet, frequency of purchase, sale details like quantity of products sold, variant sold in every area and outlet etc

## **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** setting organization standards for documentaiotn and record keeping
- **KU2.** procedures to be followed for documentation and record keeping
- **KU3.** marks and accreditations required for the organisation
- **KU4.** job responsibilities/duties for employees on documentaion and records management in the organisation
- **KU5.** erp (enterprise resource planning) software system to be used/followed in the organisation
- **KU6.** documentation system to be followed in the organization like, production chart, process chart and finished products chart
- **KU7.** details to be recorded on raw materials, packaging materials, finished products, production, process parameters and quality
- **KU8.** details to be recorded and maintained on marketing, logistics, distribution and sale
- **KU9.** methods to document and maintain records on observations (if any) related to organisation, raw materials, process, finished products, quality, storage, distribution, logistics and sale
- **KU10.** methods to track back the record from finished product to raw material
- **KU11.** basic computer knowledge







# **KU12.** ERP system to be followed in the organisation

## **Generic Skills (GS)**

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

- **GS1.** note thet information to be communicated
- **GS2.** fill relevant applications required for food processing units
- **GS3.** note the information required for establishing and operating food processing unit
- **GS4.** document the process, process equipments and parameters for products processed
- **GS5.** record the raw materials, finished products produced, inventory, stock distribution, marketing and sales
- **GS6.** note down observations (if any) related to the process or organisation
- **GS7.** write communications to government officials, financial institutions and employees
- **GS8.** note down the data for erp or as required by the organization
- **GS9.** read communications from various government departments
- **GS10.** read and interpret and process flowchart and process required for all products produced
- **GS11.** read internal communications from the employees
- GS12. read communications from market, various trade related organisations
- **GS13.** discuss task lists, schedules and activities with the employees
- **GS14.** effectively communicate with the employees
- **GS15.** question the employees in order to understand the nature of the problem and to clarify queries
- **GS16.** attentively listen and comprehend the information given by the speaker
- **GS17.** communicate clearly with the employees to understand and resolve issues
- **GS18.** communicate clearly with the vendors, government officials, bankers, employees, customers, consumers etc with respect to organisation, process, product, sales etc
- **GS19.** analyse critical points in day to day tasks through experience and observation and identify control measures to solve the issue
- **GS20.** handle and resolve issues related to entire operation, in case of issues beyond the capability of the employees
- **GS21.** plan and organize the work
- GS22. plan and allot work/responsibilities to the employees
- **GS23.** organize raw materials and packaging materials required for all products produced in the organisation
- GS24. plan to prioritize work based on organisational needs
- **GS25.** plan to prioritize the work based on the order/market requirement
- **GS26.** plan to utilize the time and equipments effectively
- **GS27.** plan to utilise the time effectively
- **GS28.** support the employees in their tasks to achieve production and sales
- **GS29.** understand customer requirements and their priority and respond as per their needs
- **GS30.** support employees in solving problems by understanding the problems







- **GS31.** arrive at possible solution for problems related to operation, by discussing with experienced/concerned people
- **GS32.** apply domain information about maintenance processes and technical knowledge about tools and equipment
- **GS33.** use common sense and make judgments on day to day basis
- GS34. use reasoning skills to identify and resolve basic problems
- **GS35.** use intuition to detect any potential problems which could arise during operations
- **GS36.** use acquired knowledge of the process for identifying and handling issues







## **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Document and maintain records on organization	12	8	-	-
<b>PC1.</b> document and maintain records on organisation layout like blueprint the food processing unit, interior and exterior design of the food processing unit	3	2	-	-
<b>PC2.</b> document and maintain records on processing machinery, movable andimmovable assets of the food processing unit	3	2	-	-
<b>PC3.</b> document and maintain records on personal and health records, on each employees employed in the food processing unit	3	2	-	-
<b>PC4.</b> document and maintain records on accounts records on loans, income, expenses, profit/loss etc of the organisation	3	2	-	-
Document and maintain records on raw materials and machineries	21	9	-	-
<b>PC5.</b> document and maintain records on all raw materials, ingredients and packaging materials handled	4	2	-	-
<b>PC6.</b> document and maintain records on all raw materials, ingredients and packaging materials handled, like name of the supplier, batch details, quantity supplied and quality of the materials supplies etc	6	2	-	-
<b>PC7.</b> document and maintain records on all machineries, equipments and tools installed/used in the processing unit, quotations, invoice, supplier/manufacturer details, manuals of all machineries / quipments, annual maintenance details etc	6	2	-	-
PC8. document and maintaining records on maintenance of each machinery/equipment, machine utilization, machine performance, breakdown details, corrective actions, spares changed, machine/equipment condition etc	5	3	-	-
Document and maintain records on production, quality, storage and distribution	21	19	-	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC9.</b> document and maintain records on production details like types of products produced, quantity produced, batch number, date of manufacture, date of expiry, raw materials used for producing the batch, and packaging details like type of packaging materials used, category of packaging etc	3	3	-	-
<b>PC10.</b> document and maintain records on supplier quality report on raw materials, ingredients, packaging materials, internal and external quality report on finished products, consumer and customer complaints, corrective actions, legal documents (if any)	2	3	-	-
<b>PC11.</b> document and maintain records on production details raw material/packaging materials used with batch and supplier details, production quantity, process parameters, process time, down time, production yield, machineries used for processing and its capacity utilization.	4	2	-	-
<b>PC12.</b> document and maintain records on inventory of raw materials, machineries/ equipments/ tools, packaging materials, finished products, consumables, utilities etc	2	3	-	-
<b>PC13.</b> document and maintain records on the storage of finished products like quantity stored, quality of stock saleable or to be disposed), condition of stock (like packaging condition / rework /repack required)	4	2	-	-
<b>PC14.</b> document and maintain records on storage facility, like condition of storage facility, storage parameters if any like temperature, humidity, pressure (as applicable), space utilised, stacking procedure etc	3	3	-	-
<b>PC15.</b> document and maintain records on distribution details like transport details, quality, hygiene and cleanliness of vehicle, quantity loaded in the vehicle, distribution routes, outlet details, customer/consumer details, distribution quantity, quantity returned etc.	3	3	-	-
Document and maintain records on marketing and sales	6	4	-	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC16.</b> document and maintain records on marketing schemes, like discounts, free samples given, customer/consumer details, quantity marketed, outcome of marketing on special schemes etc	3	2	-	-
<b>PC17.</b> document and maintain records on sale like customer details, customer type, ocation, quantity purchased by each utlet, frequency of purchase, sale details like quantity of products sold, variant sold in every area and outlet etc	3	2	-	-
NOS Total	60	40	-	-







## **National Occupational Standards (NOS) Parameters**

NOS Code	FIC/N9009
NOS Name	Complete documentation and record keeping related to processed foodentrepreneur
Sector	Food Processing
Sub-Sector	Fruits and Vegetables, Food Grain Milling, Dairy Products, Meat and Poultry, Fish and Sea Food, Bread and Bakery, Alcoholic Beverages, Aerated Water/Soft Drinks, Soya Food, Packaged Foods
Occupation	Processing
NSQF Level	5
Credits	TBD
Version	1.0
Last Reviewed Date	23/02/2017
Next Review Date	31/03/2022
<b>Deactivation Date</b>	31/03/2022
NSQC Clearance Date	03/08/2018







## FIC/N9010: Ensure food safety, hygiene and sanitation

### **Description**

This OS unit is about maintaining food safety hygiene and sanitation in the processing unit

### Scope

The scope of this role will include:

#### **Elements and Performance Criteria**

#### Food hygiene and sanitation

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

- **PC1.** follow food hygiene and sanitation in the food processing unit for producing food that is safe and suitable for consumption, by producing food in hygienic and safe area following good manufacturing practices controlling contaminants and pests
- **PC2.** follow environmental hygiene by producing food in areas free from potential sources of contamination from the environment
- PC3. follow hygienic production of food by controlling contamination from air, soil, water, pesticides etc in the processing unit protecting food from contamination with animal (pest) waste by controlling health of animal and plant that are near the food processing area managing wastes, storing harmful substances appropriately inspecting the raw materials, ingredients, finished products for physical, chemical and microbiological parameters packing products in appropriate packaging materials, labelling and storing in designated area free from pests and infestations
- PC4. handling storage and distribution by sorting and removing food and food ingredients that are unfit for human consumption, before storage disposing of rejected material in hygienic manner protecting food and food ingredients from contamination by pests, chemical, physical or microbiological contaminants or other objectionable substances during handling, storage and distribution preventing deterioration and spoilage of food by controlling temperature, humidity etc storing raw materials and finished products in controlled environment by maintaining temperature, humidity etc following stock rotation through FIFO/FEFO transporting food in adequate hygiene conditions to maintain quality until reaching customer
- **PC5.** clean, maintain and monitor food processing equipments periodically and use it only for specified purpose
- **PC6.** follow personnel hygiene by use of glove, hairnets, masks, ear plugs, goggles, shoes etc in the processing unit
- **PC7.** follow housekeeping practices by having designated area for all materials/tools and storing them in designated areas
- **PC8.** locate food processing establishment in clean area free from pollution, infestation and pests, waste, drainage, flooding areas
- **PC9.** design food processing area to facilitate hygienic operations, regulated flow in the process from the arrival of the raw material to the finished product, and avoiding cross-contamination, adequate air flow, ventilation and lighting







- **PC10.** design food processing establishments such that it is easy to clean, easy to maintain and disinfect, has proper drainage system, prevent entry of contaminants and pests, prevent cross-connection with the sewage system and any other waste effluent system, with no cross-connections between potable and non-potable water
- **PC11.** document and maintain records on purchase, process, and distribution for the credibility and effectiveness of the food safety control system, for product recall (in case of concerns) by tracking back records
- **PC12.** knowledge on physical, chemical and biological hazards and methods to prevent them *Hazard Analysis and Critical Control Point*

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

- **PC13.** understand the principles of hazard analysis and critical control point (haccp) and implement it in the food processing unit
- **PC14.** identify the potential hazard(s) associated with food production at all stages, from raw material procurement, processing, distribution, to sale and consumption
- **PC15.** determine the critical control points (ccp) points in the process (including procurement, manufacture, transport/distribution) that can be controlled to eliminate the hazard(s) or minimize its occurrence
- **PC16.** establish critical limit(s) to ensure that the critical control points are under control
- **PC17.** establish a system to monitor control of the critical control points through scheduled testing or observations
- **PC18.** take corrective action when any critical control points is not under control
- **PC19.** establish verification procedures to confirm that the haccp system is working effectively
- PC20. document all procedures and records related to HACCP

#### **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** organization standards and procedures to be followed for food safety, hygeine and sanitation
- **KU2.** food safety and hygiene standards to be followed
- **KU3.** personal hygiene and fitness requirements
- **KU4.** job responsibilities/duties for following food safety, hygeine and sanitation
- **KU5.** personal protective equipment and clothing to be used
- **KU6.** safe methods to use materials and equipment
- **KU7.** housekeeping methods and importance
- **KU8.** safe disposal methods for waste
- **KU9.** methods for minimizing environmental damage
- **KU10.** accident compensation policy for organisation
- **KU11.** importance of following health, hygiene and safety standards and the impact of not following the standards
- **KU12.** design requirements for internal and external structures of the foodprocessing unit
- **KU13.** possible physical, chemical and biological hazards and methods of prevention of various hazards







- **KU14.** food laws and regulations
- **KU15.** personnel hygiene requirement
- **KU16.** different types of sanitizers used for process area, equipments and the procedure to use
- **KU17.** quality parameters and quality assessment based on physical parameters, basic food microbiology
- KU18. cleaning and sanitation of guipments and work area
- **KU19.** clean-in-place & clean-out-of-place methods and procedures
- **KU20.** storage norms for raw materials, packaging material and finished products
- **KU21.** stock rotation of raw materials and finished products based on first-in-firstout (FIFO)/first-expiry-first-out (FEFO)
- KU22. food safety and hygiene practices
- **KU23.** good manufacturing practice (GMP)
- KU24. hazard analysis and critical control point (HACCP)

#### **Generic Skills (GS)**

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

- **GS1.** note thet information to be communicated
- **GS2.** fill relevant applications required for food processing units
- **GS3.** note the information required for establishing and operating food processing unit
- **GS4.** document the process, process equipments and parameters for products processed
- **GS5.** record the raw materials, finished products produced, inventory, stock distribution, marketing and sales
- **GS6.** note down observations (if any) related to the process or organisation
- **GS7.** write communications to government officials, financial institutions and employees
- **GS8.** note down the data for erp or as required by the organization
- **GS9.** read communications from various government departments
- **GS10.** read and interpret and process flowchart and process required for all products produced
- **GS11.** read internal communications from the employees
- GS12. read communications from market, various trade related organisations
- **GS13.** discuss task lists, schedules and activities with the employees
- **GS14.** effectively communicate with the employees
- **GS15.** question the employees in order to understand the nature of the problem and to clarify queries
- **GS16.** attentively listen and comprehend the information given by the speaker
- **GS17.** communicate clearly with the employees to understand and resolve issues
- **GS18.** communicate clearly with the vendors, government officials, bankers, employees, customers, consumers etc with respect to organisation, process, product, sales etc
- **GS19.** analyse critical points in day to day tasks through experience and observation and identify control measures to solve the issue







- **GS20.** handle and resolve issues related to entire operation, in case of issues beyond the capability of the employees
- **GS21.** plan and organize the work
- GS22. plan and allot work/responsibilities to the employees
- **GS23.** organize raw materials and packaging materials required for all products produced in the organisation
- **GS24.** plan to prioritize work based on organisational needs
- **GS25.** plan to prioritize the work based on the order/market requirement
- **GS26.** plan to utilize the time and equipments effectively
- **GS27.** plan to utilise the time effectively
- **GS28.** support the employees in their tasks to achieve production and sales
- **GS29.** understand customer requirements and their priority and respond as per their needs
- **GS30.** support employees in solving problems by understanding the problems
- **GS31.** arrive at possible solution for problems related to operation, by discussing with experienced/concerned people
- **GS32.** apply domain information about maintenance processes and technical knowledge about tools and equipment
- **GS33.** use common sense and make judgments on day to day basis
- GS34. use reasoning skills to identify and resolve basic problems
- **GS35.** use intuition to detect any potential problems which could arise during operations
- **GS36.** use acquired knowledge of the process for identifying and handling issues







## **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Food hygiene and sanitation	24	36	-	-
<b>PC1.</b> follow food hygiene and sanitation in the food processing unit for producing food that is safe and suitable for consumption, by producing food in hygienic and safe area following good manufacturing practices controlling contaminants and pests	2	3	-	-
<b>PC2.</b> follow environmental hygiene by producing food in areas free from potential sources of contamination from the environment	2	3	-	-
PC3. follow hygienic production of food by controlling contamination from air, soil, water, pesticides etc in the processing unit protecting food from contamination with animal (pest) waste by controlling health of animal and plant that are near the food processing area managing wastes, storing harmful substances appropriately inspecting the raw materials, ingredients, finished products for physical, chemical and microbiological parameters packing products in appropriate packaging materials, labelling and storing in designated area free from pests and infestations	2	3	-	-
PC4. handling storage and distribution by sorting and removing food and food ingredients that are unfit for human consumption, before storage disposing of rejected material in hygienic manner protecting food and food ingredients from contamination by pests, chemical, physical or microbiological contaminants or other objectionable substances during handling, storage and distribution preventing deterioration and spoilage of food by controlling temperature, humidity etc storing raw materials and finished products in controlled environment by maintaining temperature, humidity etc following stock rotation through FIFO/FEFO transporting food in adequate hygiene conditions to maintain quality until reaching customer	2	3	-	-
<b>PC5.</b> clean, maintain and monitor food processing equipments periodically and use it only for specified purpose	2	3	-	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC6.</b> follow personnel hygiene by use of glove, hairnets, masks, ear plugs, goggles, shoes etc in the processing unit	2	3	-	-
<b>PC7.</b> follow housekeeping practices by having designated area for all materials/tools and storing them in designated areas	2	3	-	-
<b>PC8.</b> locate food processing establishment in clean area free from pollution, infestation and pests, waste, drainage, flooding areas	2	3	-	-
<b>PC9.</b> design food processing area to facilitate hygienic operations, regulated flow in the process from the arrival of the raw material to the finished product, and avoiding cross-contamination, adequate air flow, ventilation and lighting	2	3	-	-
<b>PC10.</b> design food processing establishments such that it is easy to clean, easy to maintain and disinfect, has proper drainage system, prevent entry of contaminants and pests, prevent cross-connection with the sewage system and any other waste effluent system, with no cross-connections between potable and non-potable water	2	3	-	-
<b>PC11.</b> document and maintain records on purchase, process, and distribution for the credibility and effectiveness of the food safety control system, for product recall (in case of concerns) by tracking back records	2	3	-	-
<b>PC12.</b> knowledge on physical, chemical and biological hazards and methods to prevent them	2	3	-	-
Hazard Analysis and Critical Control Point	11	29	-	-
<b>PC13.</b> understand the principles of hazard analysis and critical control point (haccp) and implement it in the food processing unit	2	3	-	-
<b>PC14.</b> identify the potential hazard(s) associated with food production at all stages, from raw material procurement, processing, distribution, to sale and consumption	2	3	-	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC15.</b> determine the critical control points (ccp) points in the process (including procurement, manufacture, transport/distribution) that can be controlled to eliminate the hazard(s) or minimize its occurrence	1	4	-	-
<b>PC16.</b> establish critical limit(s) to ensure that the critical control points are under control	1	4	-	-
<b>PC17.</b> establish a system to monitor control of the critical control points through scheduled testing or observations	1	4	-	-
<b>PC18.</b> take corrective action when any critical control points is not under control	1	4	-	-
<b>PC19.</b> establish verification procedures to confirm that the haccp system is working effectively	1	4	-	-
<b>PC20.</b> document all procedures and records related to HACCP	2	3	-	-
NOS Total	35	65	-	-







### **National Occupational Standards (NOS) Parameters**

NOS Code	FIC/N9010
NOS Name	Ensure food safety, hygiene and sanitation
Sector	Food Processing
Sub-Sector	Fruits and Vegetables, Food Grain Milling, Dairy Products, Meat and Poultry, Fish and Sea Food, Bread and Bakery, Alcoholic Beverages, Aerated Water/Soft Drinks, Soya Food, Packaged Foods
Occupation	Processing
NSQF Level	5
Credits	TBD
Version	1.0
Last Reviewed Date	23/02/2017
Next Review Date	31/03/2022
<b>Deactivation Date</b>	31/03/2022
NSQC Clearance Date	03/08/2018

## Assessment Guidelines and Assessment Weightage

#### **Assessment Guidelines**

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







- 6. To pass the Qualification Pack assessment, every trainee should score the Recommended Pass % aggregate for the QP.
- 7. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack.

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

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

## **Assessment Weightage**

#### Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
FIC/N9005.Evaluate and develop entrepreneur skills	35	65	-	-	100	15
FIC/N9006.Selection of product and business planning	35	65	-	-	100	15
FIC/N9007.Prepare for start up of food processing unit	35	65	-	-	100	15
FIC/N9008.Start food processing unit	35	65	-	-	100	20
FIC/N9009.Complete documentation and record keeping related to processed foodentrepreneur	60	40	-	-	100	15
FIC/N9010.Ensure food safety, hygiene and sanitation	35	65	-	-	100	20
Total	235	365	-	-	600	100







## **Acronyms**

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training
CIP	Clean In Place
СОР	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
НАССР	Hazard Analysis and Critical Control Point







# Glossary

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







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