







Assistant Sorter and Grader - Fruits & Vegetables

QP Code: FIC/Q0108

Version: 5.0

NSQF Level: 3

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FIC/Q0108: Assistant Sorter and Grader - Fruits & Vegetables

Brief Job Description

An Assistant Sorter/Grader - Fruits and Vegetables is responsible for sorting and grading different types of produce, including fruits and vegetables, based on applicable parameters. The individual also packs and stores the produce before it is dispatched to the buyers and markets.

Personal Attributes

The individual should have attention-to-detail, problem-solving and organizational skills. The person should be physically fit to work for long durations. The individual should have good hand-eye coordination and basic verbal and written communication skills.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

- 1. FIC/N9026: Prepare for production
- 2. FIC/N0129: Sort, grade, pack and store the produce
- 3. FIC/N9906: Apply food safety guidelines in Food Processing
- 4. DGT/VSQ/N0101: Employability Skills (30 Hours)

Qualification Pack (QP) Parameters

| Sector | Food Processing |
|-------------------------------|-----------------------|
| Sub-Sector | Fruits and Vegetables |
| Occupation | Sorting and Grading |
| Country | India |
| NSQF Level | 3 |
| Credits | 10 |
| Aligned to NCO/ISCO/ISIC Code | NCO -2015/751 |









| Minimum Educational Qualification & Experience | 10th grade pass OR 8th grade pass with 3 Years of experience in food processing OR Previous relevant Qualification of NSQF Level 2 with 3 Years of experience in food processing OR Previous relevant Qualification of NSQF Level 2.5 with 1.5 years of experience in food processing |
|---|---|
| Minimum Level of Education for Training in School | 8th Class |
| Pre-Requisite License or Training | NA |
| Minimum Job Entry Age | 16 Years |
| Last Reviewed On | NA |
| Next Review Date | 22/10/2027 |
| NSQC Approval Date | 22/10/2024 |
| Version | 5.0 |
| Reference code on NQR | QG-03-FI-03328-2024-V4-FICSI |
| NQR Version | 4.0 |









FIC/N9026: Prepare for production

Description

This NOS unit is about performing various tasks prior to production in the food processing industry.

Scope

The scope covers the following:

- Plan for production
- Clean and maintain work area, machineries, and tools for production
- Organize for production

Elements and Performance Criteria

Plan for production

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

- **PC1.** identify work requirements by obtaining instructions from the supervisor. Instructions: process chart, product flow chart, formulation, chart, etc.
- **PC2.** plan and prioritize tasks as per work schedule. Tasks: inspect, clean, maintain, verify, etc.
- **PC3.** estimate manpower and material requirements as per work requirement. Material: raw materials and packaging materials
- **PC4.** ensure required quantity of raw materials, packaging materials, equipment, and manpower for production
- **PC5.** plan capacity utilization of machinery with respect to the processing time, production order, and batch size for each product

Clean and maintain work area, machineries, and tools for production

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

- **PC6.** clean and maintain the work area as per organizational procedures
- **PC7.** clean and maintain the machines and tools and sanitize them as per the organization's specifications and standards
- **PC8.** dispose of the waste material at designated place safely. Waste material: hazardous waste, food waste, packaging waste, etc.
- **PC9.** inspect the tools, equipment, and machinery to ascertain suitability for use
- **PC10.** report information such as faulty tools and equipment to the concerned authority

Organize for production

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

- PC11. organize tools and equipment
- **PC12.** receive and organize production materials appropriately. Production materials: raw materials, packaging materials, etc.
- **PC13.** allot responsibilities/work to the assistants and helpers

Knowledge and Understanding (KU)









The individual on the job needs to know and understand:

- **KU1.** production planning process
- **KU2.** analysis and interpretation of various process charts, product flow charts, etc.
- **KU3.** resource management process
- **KU4.** procedure to estimate manpower and raw material
- KU5. capacity utilization calculation
- **KU6.** organizational policies and SOP on cleanliness
- **KU7.** operating procedure and general maintenance of food production machineries
- **KU8.** waste management procedures
- **KU9.** methods to inspect tools, equipment and machinery
- **KU10.** procedure to allot work or responsibility to the team

Generic Skills (GS)

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

- **GS1.** read and interpret organizational policies, SOP, production charts, etc.
- **GS2.** communicate effectively with subordinates as well as supervisors
- **GS3.** plan and prioritize various tasks
- **GS4.** be always punctual and courteous
- **GS5.** organize all process/equipment manuals to access information easily
- GS6. discuss task lists, schedules, and activities with the senior/supervisor









Assessment Criteria

| Assessment Criteria for Outcomes | Theory Marks | Practical Marks | Project Marks | Viva Marks |
|---|-----------------|--------------------|------------------|---------------|
| Plan for production | 11 | 25 | - | - |
| PC1. identify work requirements by obtaining instructions from the supervisor. Instructions: process chart, product flow chart, formulation, chart, etc. | 3 | 6 | - | - |
| PC2. plan and prioritize tasks as per work schedule. Tasks: inspect, clean, maintain, verify, etc. | 2 | 5 | - | - |
| PC3. estimate manpower and material requirements as per work requirement. Material: raw materials and packaging materials | 2 | 4 | - | - |
| PC4. ensure required quantity of raw materials, packaging materials, equipment, and manpower for production | 2 | 5 | - | - |
| PC5. plan capacity utilization of machinery with respect to the processing time, production order, and batch size for each product | 2 | 5 | - | - |
| Clean and maintain work area, machineries, and tools for production | 14 | 32 | - | - |
| PC6. clean and maintain the work area as per organizational procedures | 3 | 7 | - | - |
| PC7. clean and maintain the machines and tools and sanitize them as per the organization's specifications and standards | 3 | 7 | - | - |
| PC8. dispose of the waste material at designated place safely. Waste material: hazardous waste, food waste, packaging waste, etc. | 3 | 7 | - | - |
| PC9. inspect the tools, equipment, and machinery to ascertain suitability for use | 3 | 6 | - | - |
| PC10. report information such as faulty tools and equipment to the concerned authority | 2 | 5 | - | - |
| Organize for production | 5 | 13 | - | - |
| PC11. organize tools and equipment | 2 | 7 | - | _ |









| Assessment Criteria for Outcomes | Theory Marks | Practical Marks | Project Marks | Viva Marks |
|--|-----------------|--------------------|------------------|---------------|
| PC12. receive and organize production materials appropriately. Production materials: raw materials, packaging materials, etc. | 2 | 4 | - | - |
| PC13. allot responsibilities/work to the assistants and helpers | 1 | 2 | - | - |
| NOS Total | 30 | 70 | - | - |









National Occupational Standards (NOS) Parameters

| NOS Code | FIC/N9026 |
|---------------------|------------------------|
| NOS Name | Prepare for production |
| Sector | Food Processing |
| Sub-Sector | Generic |
| Occupation | Production |
| NSQF Level | 3 |
| Credits | TBD |
| Version | 1.0 |
| Last Reviewed Date | 08/05/2025 |
| Next Review Date | 08/05/2028 |
| NSQC Clearance Date | 08/05/2025 |









FIC/N0129: Sort, grade, pack and store the produce

Description

This unit is about sorting and grading various agricultural produce. It also includes packing and storing the produce before its transportation

Scope

The scope covers the following:

- Wash and dry the produce
- Sort and grade the produce
- Pack and store the produce
- Carry out the post-production activities

Elements and Performance Criteria

Wash and dry the produce

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

- **PC1.** retrieve agricultural produce from the warehouse/cold storage
- **PC2.** check the quality of produce based on physical and sensory parameters
- **PC3.** set controls for float/water tank and pump water to the required level for washing produce
- **PC4.** use chlorine in the recommended quantity in the water to kill pathogenic and non-pathogenic micro-organisms
- **PC5.** wash the produce to remove impurities including chlorine from their surface
- **PC6.** dry the washed fruits and vegetables following the appropriate method
- **PC7.** clean the produce unsuitable for water treatment
- **PC8.** apply waxing treatment depending on the type of produce to reduce water loss and improve appearance

Sort and grade produce

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

- **PC9.** identify and remove the severely damaged produce
- **PC10.** separate the unwanted material from the produce following the appropriate method
- **PC11.** remove dry foliage attached to the onion and garlic bulbs and sort them based on their size using measurement rings of different diameters
- PC12. sort the produce based on colour, and record the readings
- PC13. grade the produce based on diameter, length, weight and size
- **PC14.** sample the produce and coordinate their quality analysis with the quality-testing lab, as required
- **PC15.** collect the sorted and graded produce using appropriate accessories, such as baskets, tubs, crates, etc
- **PC16.** identify and report any malfunctions/ discrepancies to the supervisor and take appropriate corrective action, as instructed









Pack and store the produce

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

- **PC17.** carry the containers with sorted and graded produce to the packaging area safely
- **PC18.** carry out primary and secondary packaging of the produce, as applicable
- **PC19.** carry out labelling of the produce with the necessary information as per the applicable FSSAI guidelines, e.g. net weight, batch code, date of packing, best before date, storage conditions, country of origin, etc
- **PC20.** store the packed produce in a clean and hygienic storage area, under the recommended temperature and humidity
- **PC21.** use appropriate storage accessories, such as cartons, crates, gunny bags, and mesh, to store the packed produce
- **PC22.** follow the organisational procedure to dispatch the packed produce to their destination using a suitable transportation method

Carry out post-production activities

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

- **PC23.** clean and disinfect the work area, tools, equipment and machinery using the recommended cleaning agents
- PC24. follow the appropriate Clean-in-place (CIP) and Clean-out-of-Place (COP) methods
- **PC25.** carry out basic repair and maintenance of the tools, equipment and machinery
- **PC26.** ensure periodic maintenance of the tools, equipment and machinery as per the manufacturer's instructions
- **PC27.** carry out appropriate documentation concerning the sorting, grading, packing and storage of fruits and vegetables

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** the basic food microbiology
- **KU2.** the laws and regulations applicable to food handling, safety, packaging and labelling
- **KU3.** the Agricultural and Processed Food Products Export Development Authority (APEDA) & AgMark (Agricultural Marketing) standards
- **KU4.** the maturity index of different fruits and vegetables
- **KU5.** the factors affecting the maturity of fruits and vegetables
- **KU6.** the variety, characteristics and quality of different types of fruits and vegetables, including physical and sensory characteristics
- **KU7.** the washing process and relevant chemicals used for washing produce
- **KU8.** the benefits and process of Ozone washing of fruits and vegetables
- **KU9.** the pack house handling procedures
- **KU10.** the use of modern equipment in fruit and vegetable sorting and grading operations, e.g. electronic grader, mechanical grader, weight grader, electronic colour sorter, hydro-cooling, forced-air cooling, and vacuum cooling machines, mechanical sieving machine, ripening, destoner and de-leafer, automatic packaging machines, labelling equipment, etc









- **KU11.** the new and relevant technologies, such as air blowing, cameras, optical sorters and Near-Infrared (NIR) spectroscopy, laser and X-ray sorting machine, etc.
- **KU12.** different grade designations of the agricultural produce according to AgMark
- **KU13.** the methods to identify rejects of different types of produce
- **KU14.** the procedure to handle rejected materials
- **KU15.** the process of dilution and concentration of chlorine water
- **KU16.** how to operate and control the conveyor belt, brushing conveyor and grading line
- **KU17.** the optimum use of the high-pressure spray system and dryer
- **KU18.** the parameters for the quality assessment of fruits and vegetables during the sorting and grading
- **KU19.** how to carry out waxing of fruits and vegetables
- KU20. how to calibrate different equipment for use, such as electronic colour sorter
- **KU21.** the process of randomized and systematic sampling of produce
- **KU22.** the importance of labelling produce and the information to be included on labels
- **KU23.** different types of packaging material used for packing fresh produce, such as primary and secondary packaging
- **KU24.** the controls and operations of different types of packing machines
- **KU25.** the use and maintenance of different types of machinery to sort and grade produce
- **KU26.** the preventive maintenance of relevant tools, equipment and machinery
- **KU27.** the methods to organise pallets in the storage area
- **KU28.** the storage procedures for incoming produce, packaging materials and packed produce
- **KU29.** the safe use and storage of different types of relevant disinfectants
- **KU30.** the relevant cleaning practices, such as Clean-in-place (CIP) and Clean-in-place (CIP) methods
- **KU31.** the elements of Good Manufacturing Practices (GMP) and Good Hygiene Practices (GHP) applicable to sorting and grading of produce
- **KU32.** the applicable documentation requirements
- **KU33.** using sensor technologies (e.g., RGB cameras, NIR spectroscopy) and machine learning models to classify fruits and vegetables by size, color, ripeness, and defects
- **KU34.** implementing automated conveyor systems integrated with real-time data analysis and IoT for dynamic sorting and grading adjustments
- **KU35.** Iinking sorting machines with ERP systems to streamline inventory updates, forecast production needs, and ensure product traceability through batch tracking

Generic Skills (GS)

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

- **GS1.** maintain work-related notes and records
- **GS2.** read the relevant literature to learn about the latest developments in the field of work
- **GS3.** listen attentively to understand the information/ instructions being shared by the speaker
- **GS4.** communicate clearly and politely with co-workers and clients









- **GS5.** coordinate with co-workers to achieve work objectives
- **GS6.** prioritize tasks to ensure their timely completion
- **GS7.** identify possible disruptions to work and take appropriate preventive measures
- **GS8.** make quick decisions to deal with workplace emergencies/ accidents









Assessment Criteria

| Assessment Criteria for Outcomes | Theory Marks | Practical Marks | Project Marks | Viva Marks |
|---|-----------------|--------------------|------------------|---------------|
| Wash and dry the produce | 11 | 20 | - | 7 |
| PC1. retrieve agricultural produce from the warehouse/cold storage | 1 | 3 | - | 0.5 |
| PC2. check the quality of produce based on physical and sensory parameters | 2 | 3 | - | 1 |
| PC3. set controls for float/water tank and pump water to the required level for washing produce | 1 | 3 | - | 1 |
| PC4. use chlorine in the recommended quantity in the water to kill pathogenic and non-pathogenic micro-organisms | 1 | 2 | - | 1 |
| PC5. wash the produce to remove impurities including chlorine from their surface | 1 | 2 | - | 1 |
| PC6. dry the washed fruits and vegetables following the appropriate method | 2 | 2 | - | 0.5 |
| PC7. clean the produce unsuitable for water treatment | 1 | 2 | - | 1 |
| PC8. apply waxing treatment depending on the type of produce to reduce water loss and improve appearance | 2 | 3 | - | 1 |
| Sort and grade produce | 8 | 14 | - | 6 |
| PC9. identify and remove the severely damaged produce | 1 | 2 | - | 1 |
| PC10. separate the unwanted material from the produce following the appropriate method | 1 | 2 | - | 0.5 |
| PC11. remove dry foliage attached to the onion and garlic bulbs and sort them based on their size using measurement rings of different diameters | 1 | 1 | - | 1 |
| PC12. sort the produce based on colour, and record the readings | 1 | 2 | - | 0.5 |
| PC13. grade the produce based on diameter, length, weight and size | 1 | 2 | - | 1 |









| Assessment Criteria for Outcomes | Theory Marks | Practical Marks | Project Marks | Viva Marks |
|---|-----------------|--------------------|------------------|---------------|
| PC14. sample the produce and coordinate their quality analysis with the quality-testing lab, as required | 1 | 1 | - | 0.5 |
| PC15. collect the sorted and graded produce using appropriate accessories, such as baskets, tubs, crates, etc | 1 | 2 | - | 0.5 |
| PC16. identify and report any malfunctions/ discrepancies to the supervisor and take appropriate corrective action, as instructed | 1 | 2 | - | 1 |
| Pack and store the produce | 6 | 8 | - | 4 |
| PC17. carry the containers with sorted and graded produce to the packaging area safely | 1 | 1 | - | 0.5 |
| PC18. carry out primary and secondary packaging of the produce, as applicable | 1 | 2 | - | 1 |
| PC19. carry out labelling of the produce with the necessary information as per the applicable FSSAI guidelines, e.g. net weight, batch code, date of packing, best before date, storage conditions, country of origin, etc | 1 | 1 | - | 0.5 |
| PC20. store the packed produce in a clean and hygienic storage area, under the recommended temperature and humidity | 1 | 1 | - | 0.5 |
| PC21. use appropriate storage accessories, such as cartons, crates, gunny bags, and mesh, to store the packed produce | 1 | 1 | - | 0.5 |
| PC22. follow the organisational procedure to dispatch the packed produce to their destination using a suitable transportation method | 1 | 2 | - | 1 |
| Carry out post-production activities | 5 | 8 | - | 3 |
| PC23. clean and disinfect the work area, tools, equipment and machinery using the recommended cleaning agents | 1 | 2 | - | 0.5 |
| PC24. follow the appropriate Clean-in-place (CIP) and Clean-out-of-Place (COP) methods | 1 | 2 | - | 0.5 |









| Assessment Criteria for Outcomes | Theory Marks | Practical Marks | Project Marks | Viva Marks |
|--|-----------------|--------------------|------------------|---------------|
| PC25. carry out basic repair and maintenance of the tools, equipment and machinery | 1 | 2 | - | 1 |
| PC26. ensure periodic maintenance of the tools, equipment and machinery as per the manufacturer's instructions | 1 | 1 | - | 0.5 |
| PC27. carry out appropriate documentation concerning the sorting, grading, packing and storage of fruits and vegetables | 1 | 1 | - | 0.5 |
| NOS Total | 30 | 50 | - | 20 |









National Occupational Standards (NOS) Parameters

| NOS Code | FIC/N0129 |
|---------------------|---|
| NOS Name | Sort, grade, pack and store the produce |
| Sector | Food Processing |
| Sub-Sector | Fruits and Vegetables |
| Occupation | Sorting and Grading |
| NSQF Level | 3 |
| Credits | 6 |
| Version | 3.0 |
| Last Reviewed Date | 22/10/2024 |
| Next Review Date | 22/10/2027 |
| NSQC Clearance Date | 22/10/2024 |









FIC/N9906: Apply food safety guidelines in Food Processing

Description

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

Scope

The scope covers the following:

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

Elements and Performance Criteria

Apply personal hygiene and follow Good Manufacturing practices at workplace

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

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









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

Implement food safety practices at the workplace

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

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

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

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









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

Generic Skills (GS)

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

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









Assessment Criteria

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









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









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









National Occupational Standards (NOS) Parameters

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









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

Description

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

Scope

The scope covers the following:

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

Elements and Performance Criteria

Introduction to Employability Skills

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

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

Constitutional values - Citizenship

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

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

Becoming a Professional in the 21st Century

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

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

Basic English Skills

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

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

Communication Skills

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

PC5. follow good manners while communicating with others

PC6. work with others in a team









Diversity & Inclusion

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

PC7. communicate and behave appropriately with all genders and PwD

PC8. report any issues related to sexual harassment

Financial and Legal Literacy

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

PC9. use various financial products and services safely and securely

PC10. calculate income, expenses, savings etc.

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

Essential Digital Skills

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

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

PC13. use internet and social media platforms securely and safely

Entrepreneurship

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

PC14. identify and assess opportunities for potential business

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

Customer Service

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

PC16. identify different types of customers

PC17. identify customer needs and address them appropriately

PC18. follow appropriate hygiene and grooming standards

Getting ready for apprenticeship & Jobs

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

PC19. create a basic biodata

PC20. search for suitable jobs and apply

PC21. identify and register apprenticeship opportunities as per requirement

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. need for employability skills

KU2. various constitutional and personal values

KU3. different environmentally sustainable practices and their importance

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

KU5. how to use basic spoken English language

KU6. Do and dont of effective communication

KU7. inclusivity and its importance

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

KU9. different types of financial products and services









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

Generic Skills (GS)

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

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









Assessment Criteria

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









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









National Occupational Standards (NOS) Parameters

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

Assessment Guidelines and Assessment Weightage

Assessment Guidelines

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









Minimum Aggregate Passing % at QP Level: 50

(**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/N9026.Prepare for production | 30 | 70 | - | - | 100 | 20 |
| FIC/N0129.Sort, grade, pack and store the produce | 30 | 50 | - | 20 | 100 | 50 |
| FIC/N9906.Apply food safety guidelines in Food Processing | 30 | 60 | - | 10 | 100 | 20 |
| DGT/VSQ/N0101.Employability Skills (30 Hours) | 20 | 30 | - | - | 50 | 10 |
| Total | 110 | 210 | - | 30 | 350 | 100 |









Acronyms

| NOS | National Occupational Standard(s) |
|-------|---|
| NSQF | National Skills Qualifications Framework |
| QP | Qualifications Pack |
| TVET | Technical and Vocational Education and Training |
| NCVET | National Council for Vocational Education and Training |
| NVEQF | National Vocational Educational Qualification Framework |
| FICSI | Food Industry Capacity & Skill Initiative |
| QP | Qualification Pack |
| NSQF | National Skills Qualification Framework |
| NSQC | National Skills Qualification Committee |
| NOS | National Occupational Standards |
| NCO | National Classification of Occupations |
| ES | Employability Skills |
| НАССР | Hazard Analysis and Critical Control Points |
| FSSAI | Food Safety and Standards Authority of India |
| GMPs | Good Manufacturing Practices |
| GHP | Good Hygiene Practices |
| PPE | Personal Protective Equipment |
| SOP | Standard Operating Procedure |
| QMS | Quality Management System |
| FEFO | First Expiry First Out |
| FIFO | First In First Out |
| СОР | Clean Out of Place |
| CIP | Clean In Place |









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 | Organisational context includes the way the organisation is structured and how it operates, including the extent of operative knowledge |
|--------------------------------------|--|
| Context | 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. |
| | Coston is a conglementation of different havings an authors having a similar |
| Sector | Sector is a conglomeration of different business operations having similar businesses and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests. |
| Sub-Sector | Sub-sector is derived from a further breakdown based on the characteristics and interests of its components. |
| Occupation | Occupation is a set of job roles, which perform similar/ related set of functions in an industry. |
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| 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 | Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task. |
| National Occupational Standard | NOS are occupational standards which apply uniquely in the Indian context. |









| Qualification Pack | 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 & Understanding (KU) | Knowledge and Understanding (KU) are statements that together specify, the technical, generic, professional, and organizational specific knowledge that an individual needs in order to perform to the required standard. |
| Organizational Context | Organisational context includes the way the organisation is structured and how it operates, including the extent of operative knowledge managers has of their relevant areas of responsibility. |
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