









# Packhouse Worker

QP Code: AGR/Q7503

Version: 3.0

NSQF Level: 3

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### AGR/Q7503: Packhouse Worker

### **Brief Job Description**

A Packhouse Worker performs a number of activities at a packhouse such as unloading, washing, sorting, ripening, grading and storing different types of horticultural produce. The person also de-greens citrus produce, packs, weighs and loads different types of produce for shipping.

#### **Personal Attributes**

The individual must be physically fit to perform a number of labour-intensive activities for long hours. The person must be able to work as per the given instructions along with the ability to co-ordinate with others to achieve the work objectives.

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

#### **Compulsory NOS:**

- 1. AGR/N7510: Unload and wash the horticultural produce
- 2. AGR/N7512: Sort, grade, size and store the produce
- 3. AGR/N7513: De-green and ripen the horticultural produce
- 4. AGR/N7514: Pack, weigh and ship the produce
- 5. AGR/N7516: Undertake maintenance of the packhouse, HVAC, tools and equipment
- 6. AGR/N9903: Maintain health and safety at the workplace
- 7. DGT/VSQ/N0101: Employability Skills (30 Hours)

#### **Qualification Pack (QP) Parameters**

Sector	Agriculture
Sub-Sector	Agriculture Industries
Occupation	Post-Harvest Supply Chain Management
Country	India
NSQF Level	3









Credits	9
Aligned to NCO/ISCO/ISIC Code	NCO-2015/NIL
Minimum Educational Qualification & Experience	10th Class OR 8th Class (with two years of (NTC/ NAC) after 8th) OR 8th grade pass and pursuing continuous schooling in regular school with vocational subject OR 8th grade pass with 2 Years of experience relevant experience OR 5th grade pass with 5 Years of experience relevant experience OR Previous relevant Qualification of NSQF Level (Level 2) with 1 Year of experience relevant experience OR Previous relevant Qualification of NSQF Level (Level 2.5) with 6 Months of experience relevant experience
Minimum Level of Education for Training in School	
Pre-Requisite License or Training	NA
Minimum Job Entry Age	16 Years
Last Reviewed On	NA
Next Review Date	27/01/2025
NSQC Approval Date	27/01/2022
Version	3.0
Reference code on NQR	QG-03-AG-00277-2023-V1.1-ASCI
NQR Version	1.1









### AGR/N7510: Unload and wash the horticultural produce

### **Description**

This OS unit is about unloading the horticultural produce received at the packhouse and washing it.

### Scope

The scope covers the following:

- Use the appropriate unloading equipment
- Unload the horticultural produce
- Wash the produce
- Optimise resource utilisation

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

#### Use the appropriate unloading equipment

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

- **PC1.** select the appropriate manual or power-operated unloading equipment according to the produce to be unloaded
- **PC2.** check the unloading equipment to ensure it is in working condition
- **PC3.** use the unloading equipment safely as per the manufacturer's instructions

#### Unload the horticultural produce

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

- **PC4.** unload the horticultural produce from the trucks ensuring no damage to it
- **PC5.** check that the delivered produce matches the purchase order and is in good condition
- **PC6.** report any defects to the supervisor
- **PC7.** assist in maintaining the record of the produce received

#### Wash the produce

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

- **PC8.** arrange the approved cleaning material for washing the produce
- **PC9.** group the produce in batches according to the variety and quality
- **PC10.** wash the produce as per the Standard Operating Procedure (SOP)

#### Optimise resource utilisation

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

- **PC11.** optimise the usage of water/ electricity/ materials in various tasks/ activities/ processes
- PC12. connect the electrical tools and equipment safely and turn off when not in use
- **PC13.** plug water leakages to prevent the wastage of water

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

The individual on the job needs to know and understand:









- **KU1.** handling procedures for different types of horticultural produce
- **KU2.** selection of unloading equipment according to the horticultural produce to be unloaded
- **KU3.** use of the relevant manual and power-operated unloading tools and equipment
- **KU4.** applicable record-keeping requirements
- KU5. approved cleaning material to wash different types of horticultural produce
- **KU6.** basic quality checks of horticultural produce
- **KU7.** basic accounting and inventory management
- **KU8.** importance of following environmental and ecological best practices
- **KU9.** benefits of resource optimisation
- KU10. ways of efficiently managing various materials used in greenhouse operations
- **KU11.** common practices of conserving electricity

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

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

- **GS1.** write work-related notes
- **GS2.** read the relevant guides and manuals
- **GS3.** communicate politely and professionally
- **GS4.** listen attentively to understand the information/ instructions being shared
- **GS5.** plan and prioritise tasks to ensure timely completion
- **GS6.** co-ordinate with the co-workers to achieve the work objectives
- **GS7.** evaluate all possible solutions to a problem to select the best one
- **GS8.** identify possible disruptions to work and take appropriate preventive measures
- **GS9.** take quick decisions to deal with workplace emergencies/ accidents









# **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Use the appropriate unloading equipment	12	14	-	8
<b>PC1.</b> select the appropriate manual or power-operated unloading equipment according to the produce to be unloaded	-	-	-	-
<b>PC2.</b> check the unloading equipment to ensure it is in working condition	-	-	-	-
<b>PC3.</b> use the unloading equipment safely as per the manufacturer's instructions	-	-	-	-
Unload the horticultural produce	6	10	-	6
<b>PC4.</b> unload the horticultural produce from the trucks ensuring no damage to it	-	-	-	-
<b>PC5.</b> check that the delivered produce matches the purchase order and is in good condition	-	-	-	-
PC6. report any defects to the supervisor	-	-	-	_
<b>PC7.</b> assist in maintaining the record of the produce received	-	-	-	-
Wash the produce	8	6	-	8
<b>PC8.</b> arrange the approved cleaning material for washing the produce	-	-	-	-
<b>PC9.</b> group the produce in batches according to the variety and quality	-	-	-	-
<b>PC10.</b> wash the produce as per the Standard Operating Procedure (SOP)	-	-	-	-
Optimise resource utilisation	4	10	-	8
<b>PC11.</b> optimise the usage of water/ electricity/ materials in various tasks/ activities/ processes	-	-	-	_
PC12. connect the electrical tools and equipment safely and turn off when not in use	-	-	-	-
PC13. plug water leakages to prevent the wastage of water	-	-	-	-









Assessment Criteria for Outcomes	Theory	Practical	Project	Viva
	Marks	Marks	Marks	Marks
NOS Total	30	40	-	30









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

NOS Code	AGR/N7510
NOS Name	Unload and wash the horticultural produce
Sector	Agriculture
Sub-Sector	Agriculture Industries
Occupation	Post-harvest Supply Chain Management
NSQF Level	3
Credits	1
Version	2.0
Last Reviewed Date	27/01/2022
Next Review Date	27/01/2025
NSQC Clearance Date	27/01/2022









### AGR/N7512: Sort, grade, size and store the produce

### **Description**

This OS unit is about sorting, grading, sizing and storing horticultural produce.

### Scope

The scope covers the following:

- Sort, grade and size the produce
- Store the produce in the packhouse

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

#### Sort, grade and size the produce

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

- **PC1.** sort out the produce that is unsuitable to be marketed or stored based on various parameters such as damage, insects, immature, over-mature, etc.
- **PC2.** carry out sizing of the produce manually or using machine sizers on the relevant parameters such as weight and diameter
- **PC3.** grade the produce on the basis of parameters such as colour, shape, firmness, etc.
- **PC4.** maintain the record of sorting, grading and sizing of the produce

#### Store the produce in the packhouse

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

- **PC5.** identify storage space according to the quantity and quality of produce to be stored
- **PC6.** apply the necessary treatment in the storage to prevent pest/ insect/ rodent infestation
- **PC7.** store the produce in the storage safely
- **PC8.** use pallets, racks and crates to arrange the produce in the packhouse
- **PC9.** maintain the appropriate temperature and Relative Humidity (RH) in the storage according to the produce and duration of storage
- **PC10.** check the produce regularly in the storage to ensure it doesn't suffer fungal infections and bacterial pathogens
- **PC11.** discard the damaged or diseased produce safely

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

The individual on the job needs to know and understand:

- **KU1.** relevant criteria and the process for sorting, grading and sizing horticultural produce
- **KU2.** storage requirements for different types of horticultural produce
- **KU3.** approved treatments to prevent pest/ insect/ rodent infestation in the storage
- **KU4.** use of pallets, racks and crates to arrange the produce in the packhouse









**KU5.** appropriate temperature and Relative Humidity (RH) requirement for storing different types of horticultural produce

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

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

- **GS1.** write work-related notes
- **GS2.** communicate politely and professionally
- GS3. read the relevant literature to learn about new latest developments in the field of work
- GS4. listen attentively to understand the information/ instructions being shared by the speaker
- **GS5.** plan and prioritise tasks to ensure timely completion
- **GS6.** co-ordinate with co-workers to achieve work objectives
- GS7. evaluate all possible solutions to a problem to select the best one
- **GS8.** identify possible disruptions to work and take appropriate preventive measures
- GS9. take quick decisions to deal with workplace emergencies/ accidents









# **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Sort, grade and size the produce	14	18	-	14
<b>PC1.</b> sort out the produce that is unsuitable to be marketed or stored based on various parameters such as damage, insects, immature, over-mature, etc.	-	-	-	-
<b>PC2.</b> carry out sizing of the produce manually or using machine sizers on the relevant parameters such as weight and diameter	-	-	-	-
<b>PC3.</b> grade the produce on the basis of parameters such as colour, shape, firmness, etc.	-	-	-	-
<b>PC4.</b> maintain the record of sorting, grading and sizing of the produce	-	-	-	-
Store the produce in the packhouse	16	22	-	16
<b>PC5.</b> identify storage space according to the quantity and quality of produce to be stored	-	-	-	-
<b>PC6.</b> apply the necessary treatment in the storage to prevent pest/ insect/ rodent infestation	-	-	-	-
<b>PC7.</b> store the produce in the storage safely	-	-	-	-
<b>PC8.</b> use pallets, racks and crates to arrange the produce in the packhouse	-	-	-	-
<b>PC9.</b> maintain the appropriate temperature and Relative Humidity (RH) in the storage according to the produce and duration of storage	-	-	-	-
<b>PC10.</b> check the produce regularly in the storage to ensure it doesn't suffer fungal infections and bacterial pathogens	-	-	-	-
<b>PC11.</b> discard the damaged or diseased produce safely	-	-	-	-
NOS Total	30	40	-	30









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

NOS Code	AGR/N7512
NOS Name	Sort, grade, size and store the produce
Sector	Agriculture
Sub-Sector	Agriculture Industries
Occupation	Post-Harvest Supply Chain Management
NSQF Level	3
Credits	2
Version	2.0
Last Reviewed Date	27/01/2022
Next Review Date	27/01/2025
NSQC Clearance Date	27/01/2022









### AGR/N7513: De-green and ripen the horticultural produce

### **Description**

This OS unit is about de-greening of citrus produce and ripening of horticultural produce.

### Scope

The scope covers the following:

- De-green the citrus produce
- Ripen the produce

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

#### De-green the citrus produce

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

- **PC1.** select mature citrus produce for de-greening
- **PC2.** use the ethylene gas in the recommended quantity for de-greening
- **PC3.** maintain the recommended temperature and Relative Humidity (RH) during the de-greening operation
- **PC4.** use the relevant Personal Protective Equipment (PPE) during the de-greening operation

#### Ripen the produce

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

- **PC5.** segregate the produce into climacteric and non-climacteric categories
- **PC6.** select produce for ripening on the basis of its maturity
- **PC7.** transfer the selected produce either into the natural ripening chamber or controlled atmospheric ripening chamber according to the ripening requirements of the produce
- **PC8.** use the approved ripening methods and chemicals to ripen the produce
- PC9. carry out ripening in batches to ensure different stocks do not get mixed
- **PC10.** maintain the record of de-greening and ripening of produce

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

The individual on the job needs to know and understand:

- **KU1.** criteria for selecting citrus produce for de-greening
- **KU2.** safe use of ethylene gas for de-greening
- KU3. use of the relevant PPE
- **KU4.** recommended temperature and relative humidity for de-greening
- **KU5.** the process of segregating horticultural produce into climacteric and non-climacteric categories
- **KU6.** the criteria for selecting various horticultural produce for ripening
- **KU7.** how to use natural ripening chamber and controlled atmospheric ripening chamber









KU8. approved methods and chemicals for ripening horticultural produce

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

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

- **GS1.** write work-related notes and maintain relevant records
- GS2. read the relevant literature to get latest updates about the field of work
- GS3. listen attentively to understand the information/ instructions being shared by the speaker
- **GS4.** communicate clearly and politely
- **GS5.** plan and prioritise tasks to ensure timely completion
- **GS6.** evaluate all possible solutions to a problem to select the best one
- GS7. co-ordinate with the co-workers to achieve work objectives
- **GS8.** identify possible disruptions to work and take appropriate preventive measures
- **GS9.** take quick decisions to deal with workplace emergencies/ accidents









# **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
De-green the citrus produce	18	24	-	12
<b>PC1.</b> select mature citrus produce for degreening	-	-	-	-
<b>PC2.</b> use the ethylene gas in the recommended quantity for de-greening	-	-	-	-
<b>PC3.</b> maintain the recommended temperature and Relative Humidity (RH) during the degreening operation	-	-	-	-
<b>PC4.</b> use the relevant Personal Protective Equipment (PPE) during the de-greening operation	-	-	-	-
Ripen the produce	12	16	-	18
<b>PC5.</b> segregate the produce into climacteric and non-climacteric categories	-	-	-	-
<b>PC6.</b> select produce for ripening on the basis of its maturity	-	-	-	-
<b>PC7.</b> transfer the selected produce either into the natural ripening chamber or controlled atmospheric ripening chamber according to the ripening requirements of the produce	-	-	-	-
<b>PC8.</b> use the approved ripening methods and chemicals to ripen the produce	-	-	-	-
<b>PC9.</b> carry out ripening in batches to ensure different stocks do not get mixed	-	-	-	-
<b>PC10.</b> maintain the record of de-greening and ripening of produce	-	-	-	-
NOS Total	30	40	-	30









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

NOS Code	AGR/N7513
NOS Name	De-green and ripen the horticultural produce
Sector	Agriculture
Sub-Sector	Agriculture Industries
Occupation	Post-harvest Supply Chain Management
NSQF Level	3
Credits	1
Version	2.0
Last Reviewed Date	27/01/2022
Next Review Date	27/01/2025
NSQC Clearance Date	27/01/2022









### AGR/N7514: Pack, weigh and ship the produce

### **Description**

This OS unit is about packing, weighing and shipping horticultural produce.

### Scope

The scope covers the following:

- Pack and weigh the produce
- Load the produce in the transport vehicle

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

#### Pack and weigh the produce

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

- **PC1.** examine the produce to be packed to ensure it is in a good condition
- **PC2.** arrange the appropriate packing material such as boxes, bags or containers according to the type of produce and ensure the packing material complies with the applicable regulations
- **PC3.** pack the produce in batches according to the relevant quality parameters while complying with the packing requirements for the produce
- **PC4.** weigh the produce using the approved weighing equipment to ensure correct weight in the packs
- **PC5.** apply labels on the packs with the relevant information
- **PC6.** arrange the packed produce in batches for shipping according to the relevant quality parameters and destination market
- **PC7.** store the produce under the recommended temperature and humidity at the packhouse, ensuring hygienic conditions
- **PC8.** pre-cool the packed produce as per the requirement before shipping

#### Load the produce in the transport vehicle

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

- **PC9.** select the appropriate equipment such as fork-lifts, rail cars, high stackers to carry and load the produce in the transport vehicle
- **PC10.** ensure the transport vehicle is made ready through pre-cooling according to the produce, climate and expected in-transit time
- **PC11.** carry and load the produce in the transport vehicle using the selected loading equipment as per the manufacturer's instructions, ensuring no damage to the produce and packing material
- **PC12.** arrange the produce in the transport vehicle appropriately to protect it from damage during transit

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

The individual on the job needs to know and understand:









- **KU1.** appropriate packing material such as boxes, bags or containers for different types of horticultural produce
- **KU2.** the practice of organising produce in batches
- **KU3.** packing requirements and the process of packing different types of horticultural produce
- **KU4.** importance of ensuring correct weight in packs and the use of approved weighing equipment
- **KU5.** labelling requirement and relevant information to include on the labels for horticultural produce
- **KU6.** the process of pre-cooling the packed horticultural produce
- **KU7.** use of the relevant equipment such as fork-lifts, rail cars, high stackers to carry and load the produce
- **KU8.** transport vehicle requirements and the process of preparing the transport vehicle for transporting the horticultural produce
- **KU9.** various practices to protect the produce while loading and in transit

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

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

- **GS1.** maintain work-related records
- GS2. read and follow the health and safety instructions
- **GS3.** listen attentively to understand the information/ instructions being shared by the speaker
- **GS4.** communicate clearly and politely
- **GS5.** plan and prioritise tasks to ensure timely completion
- **GS6.** identify possible disruptions to work and take appropriate preventive measures
- GS7. take quick decisions to deal with workplace emergencies/ accidents
- **GS8.** evaluate all possible solutions to a problem to select the best one
- **GS9.** co-ordinate with the co-workers to achieve work objectives









# **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Pack and weigh the produce	16	22	-	18
<b>PC1.</b> examine the produce to be packed to ensure it is in a good condition	-	-	-	-
<b>PC2.</b> arrange the appropriate packing material such as boxes, bags or containers according to the type of produce and ensure the packing material complies with the applicable regulations	-	-	-	-
<b>PC3.</b> pack the produce in batches according to the relevant quality parameters while complying with the packing requirements for the produce	-	-	-	-
<b>PC4.</b> weigh the produce using the approved weighing equipment to ensure correct weight in the packs	-	-	-	-
<b>PC5.</b> apply labels on the packs with the relevant information	-	-	-	-
<b>PC6.</b> arrange the packed produce in batches for shipping according to the relevant quality parameters and destination market	-	-	-	-
<b>PC7.</b> store the produce under the recommended temperature and humidity at the packhouse, ensuring hygienic conditions	-	-	-	-
<b>PC8.</b> pre-cool the packed produce as per the requirement before shipping	-	-	-	-
Load the produce in the transport vehicle	14	18	-	12
<b>PC9.</b> select the appropriate equipment such as fork-lifts, rail cars, high stackers to carry and load the produce in the transport vehicle	-	-	-	-
<b>PC10.</b> ensure the transport vehicle is made ready through pre-cooling according to the produce, climate and expected in-transit time	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC11.</b> carry and load the produce in the transport vehicle using the selected loading equipment as per the manufacturer's instructions, ensuring no damage to the produce and packing material	-	-	-	-
<b>PC12.</b> arrange the produce in the transport vehicle appropriately to protect it from damage during transit	-	-	-	-
NOS Total	30	40	-	30









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

NOS Code	AGR/N7514
NOS Name	Pack, weigh and ship the produce
Sector	Agriculture
Sub-Sector	Agriculture Industries
Occupation	Post-Harvest Supply Chain Management
NSQF Level	3
Credits	2
Version	2.0
Last Reviewed Date	27/01/2022
Next Review Date	27/01/2025
NSQC Clearance Date	27/01/2022









# AGR/N7516: Undertake maintenance of the packhouse, HVAC, tools and equipment

### **Description**

This OS unit is about carrying out the maintenance of a packhouse, Heating, Ventilation and Air Conditioning (HVAC) equipment along with the relevant tools and equipment.

### Scope

The scope covers the following:

- Maintain the packhouse
- Maintain the HVAC, tools and equipment
- Perform waste management

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

#### Maintain the packhouse

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

- **PC1.** sweep and mop the packhouse floor to maintain cleanliness
- **PC2.** clean and disinfect the pallets, racks and crates using the approved cleaning material
- **PC3.** apply the necessary treatment in the packhouse at regular intervals to prevent the outbreak of pests and diseases
- **PC4.** drain out water accumulated in the packhouse

#### Maintain the HVAC, tools and equipment

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

- **PC5.** check the Heating, Ventilation and Air Conditioning (HVAC) equipment along with other tools and equipment used in the packhouse to identify their repair and maintenance needs
- **PC6.** carry out minor repair and maintenance of the HVAC, tools and equipment
- **PC7.** co-ordinate with the supervisor to address complex repair and maintenance issues
- **PC8.** maintain the record of repair and maintenance activities

### Perform waste management

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

- **PC9.** segregate waste into appropriate categories
- **PC10.** dispose the non-recyclable waste appropriately
- PC11. deposit the recyclable and reusable materials at the identified location

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

The individual on the job needs to know and understand:

- **KU1.** how to maintain the cleanliness of a packhouse floor, pellets, racks and crates
- **KU2.** necessary treatment to prevent the outbreak of pests and diseases in a packhouse









- KU3. identification of health and safety hazards
- KU4. how to deal with minor health and safety hazards
- **KU5.** common repair and maintenance needs of HVAC, tools and equipment used in a packhouse
- KU6. how to carry out minor repair and maintenance of HVAC and the relevant tools/ equipment
- **KU7.** different methods of recycling and disposing waste
- KU8. common sources of pollution and ways to minimise it

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

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

- **GS1.** write work-related notes and maintain relevant records
- GS2. read the relevant literature to get latest updates about 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.** plan and prioritise tasks to ensure timely completion
- **GS6.** evaluate all possible solutions to a problem to select the best one
- **GS7.** co-ordinate with co-workers to achieve work objectives
- **GS8.** identify possible disruptions to work and take appropriate preventive measures
- GS9. take quick decisions to deal with workplace emergencies/ accidents









# **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Maintain the packhouse	10	15	-	10
<b>PC1.</b> sweep and mop the packhouse floor to maintain cleanliness	-	-	-	-
<b>PC2.</b> clean and disinfect the pallets, racks and crates using the approved cleaning material	-	-	-	-
<b>PC3.</b> apply the necessary treatment in the packhouse at regular intervals to prevent the outbreak of pests and diseases	-	-	-	-
<b>PC4.</b> drain out water accumulated in the packhouse	-	-	-	-
Maintain the HVAC, tools and equipment	10	15	-	10
PC5. check the Heating, Ventilation and Air Conditioning (HVAC) equipment along with other tools and equipment used in the packhouse to identify their repair and maintenance needs	-	-	-	-
<b>PC6.</b> carry out minor repair and maintenance of the HVAC, tools and equipment	-	-	-	-
<b>PC7.</b> co-ordinate with the supervisor to address complex repair and maintenance issues	-	-	-	-
PC8. maintain the record of repair and maintenance activities	-	-	-	-
Perform waste management	10	10	-	10
<b>PC9.</b> segregate waste into appropriate categories	-	-	-	-
PC10. dispose the non-recyclable waste appropriately	-	-	-	-
PC11. deposit the recyclable and reusable materials at the identified location	-	-	-	-
NOS Total	30	40	-	30









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

NOS Code	AGR/N7516
NOS Name	Undertake maintenance of the packhouse, HVAC, tools and equipment
Sector	Agriculture
Sub-Sector	Agriculture Industries
Occupation	Post-Harvest Supply Chain Management
NSQF Level	3
Credits	1
Version	3.0
Last Reviewed Date	NA
Next Review Date	27/01/2025
NSQC Clearance Date	27/01/2022









### AGR/N9903: Maintain health and safety at the workplace

### **Description**

This OS is about maintaining health and safety of self and other co-workers at the workplace

### Scope

The scope covers the following:

- Maintain personal hygiene
- Maintain clean and safe workplace
- Administer appropriate emergency procedures

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

#### Maintain personal hygiene

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

- **PC1.** wash hands, legs and face with soap/alcohol based sanitizer at reasonable intervals
- PC2. wash the worn clothes with soap and sun dry before use next time
- **PC3.** ensure the face is covered with mask or three layers of cloth-piece
- **PC4.** follow the workplace sanitization norms including distancing from sick people

#### Maintain clean and safe workplace

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

- **PC5.** carry out basic safety checks before operation of all tools, implements, and machinery and report identified hazards to the supervisor
- **PC6.** wear appropriate Personal Protective Equipment (PPE) while performing work in accordance with the workplace policy
- **PC7.** follow the instructions mentioned on the labels of chemicals/pesticides/fumigants etc to avoid hazards
- **PC8.** assess risks prior to performing manual handling jobs, and work according to currently recommended safe practices
- **PC9.** sanitize equipment, tools and machinery before and after use
- **PC10.** use equipment and materials safely and correctly and return the same to designated storage after use
- **PC11.** dispose waste safely and correctly in the designated area
- **PC12.** recognize risks to bystanders and take required action to reduce the risks
- **PC13.** work in a manner which minimizes environmental damage, ensuring all procedures and instructions for controlling risks are followed
- **PC14.** report any accidents, incidents or problems without delay to an appropriate person and take necessary immediate action to reduce further danger
- PC15. follow government / workplace advisories incase of outbreak of any disease/disaster

#### Administer appropriate emergency procedures

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









- **PC16.** follow procedures for dealing with accidents, fires and emergencies, including communicating location and directions to the location of emergency, as per the workplace requirements
- **PC17.** use emergency equipment in accordance with manufacturer's specifications and workplace requirements
- **PC18.** provide treatment appropriate to the patient's injuries in accordance with recognized first aid techniques
- **PC19.** recover (if practical), clean, inspect/test, refurbish, replace and store the first aid equipment as appropriate
- PC20. report details of first aid administered in accordance with workplace procedures

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

The individual on the job needs to know and understand:

- **KU1.** relevant legislation, standards, policies, and procedures at work
- **KU2.** relevant health and safety requirements applicable to the work environment
- **KU3.** own job role and responsibilities and sources of information pertaining to work
- **KU4.** who to approach for support in order to obtain work related information, clarifications and support
- **KU5.** importance of following health, hygiene, safety and quality standards and the impact of not following the standards on consumers and the business
- **KU6.** personal hygiene and fitness requirement
- **KU7.** importance of sanitization of the workplace
- **KU8.** types of Personal Protective Equipment (PPE) required at the workplace and their importance
- **KU9.** the correct and safe way to use materials and equipment required for the work
- **KU10.** the importance of good housekeeping at the workplace
- **KU11.** safe waste disposal methods
- KU12. methods for minimizing environmental damage during work
- **KU13.** the risks to health and safety including contagious diseases and the measures to be taken to control those risks in the area of work
- **KU14.** workplace procedures and requirements for the prevention and treatment of workplace injuries/illnesses.
- **KU15.** basic emergency first aid procedure
- **KU16.** local emergency services
- **KU17.** why accidents, incidents and problems should be reported and the appropriate actions to be taken

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

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

- **GS1.** record the data as per the requirement
- **GS2.** report problems to the appropriate personnel in a timely manner









- GS3. read instruction manual for hand tool and equipments
- GS4. communicate clearly and effectively with co-workers, and other stakeholders
- **GS5.** comprehend information shared by senior people and experts
- **GS6.** make decisions pertaining to personal hygiene and safety
- GS7. schedule daily activities and draw up priorities
- GS8. manage relationships with co-workers, manager and other stakeholders
- GS9. assess situation and identify appropriate control measures









# **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Maintain personal hygiene	10	5	-	10
<b>PC1.</b> wash hands, legs and face with soap/alcohol based sanitizer at reasonable intervals	-	-	-	-
<b>PC2.</b> wash the worn clothes with soap and sun dry before use next time	-	-	-	-
<b>PC3.</b> ensure the face is covered with mask or three layers of cloth-piece	-	-	-	-
<b>PC4.</b> follow the workplace sanitization norms including distancing from sick people	-	-	-	-
Maintain clean and safe workplace	15	15	-	15
<b>PC5.</b> carry out basic safety checks before operation of all tools, implements, and machinery and report identified hazards to the supervisor	-	-	-	-
PC6. wear appropriate Personal Protective Equipment (PPE) while performing work in accordance with the workplace policy	-	-	-	-
<b>PC7.</b> follow the instructions mentioned on the labels of chemicals/pesticides/fumigants etc to avoid hazards	-	-	-	-
<b>PC8.</b> assess risks prior to performing manual handling jobs, and work according to currently recommended safe practices	-	-	-	-
<b>PC9.</b> sanitize equipment, tools and machinery before and after use	-	-	-	-
<b>PC10.</b> use equipment and materials safely and correctly and return the same to designated storage after use	-	-	-	-
<b>PC11.</b> dispose waste safely and correctly in the designated area	-	-	-	-
<b>PC12.</b> recognize risks to bystanders and take required action to reduce the risks	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC13.</b> work in a manner which minimizes environmental damage, ensuring all procedures and instructions for controlling risks are followed	-	-	-	-
<b>PC14.</b> report any accidents, incidents or problems without delay to an appropriate person and take necessary immediate action to reduce further danger	-	-	-	-
PC15. follow government / workplace advisories incase of outbreak of any disease/disaster	-	-	-	-
Administer appropriate emergency procedures	15	5	-	10
<b>PC16.</b> follow procedures for dealing with accidents, fires and emergencies, including communicating location and directions to the location of emergency, as per the workplace requirements	-	-	-	-
<b>PC17.</b> use emergency equipment in accordance with manufacturer's specifications and workplace requirements	-	-	-	-
<b>PC18.</b> provide treatment appropriate to the patient's injuries in accordance with recognized first aid techniques	-	-	-	-
<b>PC19.</b> recover (if practical), clean, inspect/test, refurbish, replace and store the first aid equipment as appropriate	-	-	-	-
<b>PC20.</b> report details of first aid administered in accordance with workplace procedures	-	-	-	-
NOS Total	40	25	-	35









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

NOS Code	AGR/N9903
NOS Name	Maintain health and safety at the workplace
Sector	Agriculture
Sub-Sector	Generic
Occupation	Generic
NSQF Level	4
Credits	1
Version	3.0
Last Reviewed Date	26/05/2022
Next Review Date	27/05/2024
NSQC Clearance Date	27/05/2021









### **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	-	-
<b>PC1.</b> understand the significance of employability skills in meeting the job requirements	-	-	-	-
Constitutional values – Citizenship	1	1	-	-
<b>PC2.</b> identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices	-	-	-	-
Becoming a Professional in the 21st Century	1	3	-	-
<b>PC3.</b> 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	-	-
<b>PC4.</b> speak with others using some basic English phrases or sentences	-	-	-	-
Communication Skills	1	1	-	-
<b>PC5.</b> follow good manners while communicating with others	-	-	-	-
PC6. work with others in a team	-	-	-	-
Diversity & Inclusion	1	1	-	-
<b>PC7.</b> communicate and behave appropriately with all genders and PwD	-	-	-	-
PC8. report any issues related to sexual harassment	-	-	-	-
Financial and Legal Literacy	3	4	-	-
<b>PC9.</b> 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.	-	-	-	-
<b>PC11.</b> approach the concerned authorities for any exploitation as per legal rights and laws	-	-	-	-
Essential Digital Skills	4	6	-	-
<b>PC12.</b> operate digital devices and use its features and applications securely and safely	-	-	-	-
<b>PC13.</b> use internet and social media platforms securely and safely	-	-	-	-
Entrepreneurship	3	5	-	-
<b>PC14.</b> identify and assess opportunities for potential business	-	-	-	-
<b>PC15.</b> identify sources for arranging money and associated financial and legal challenges	-	-	-	-
Customer Service	2	2	-	-
PC16. identify different types of customers	-	-	-	-
<b>PC17.</b> identify customer needs and address them appropriately	-	-	-	-
<b>PC18.</b> 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	-	-	-	-
<b>PC21.</b> 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	NA
Next Review Date	30/06/2025
NSQC Clearance Date	30/06/2022

### Assessment Guidelines and Assessment Weightage

#### **Assessment Guidelines**

- 1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.
- 2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
- 3. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below).
- 4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training center based on these criteria.
- 5. In case of successfully passing only certain number of NOSs, the trainee is eligible to take subsequent assessment on the balance NOS's to pass 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
AGR/N7510.Unload and wash the horticultural produce	30	40	-	30	100	15
AGR/N7512.Sort, grade, size and store the produce	30	40	-	30	100	20
AGR/N7513.De-green and ripen the horticultural produce	30	40	-	30	100	15
AGR/N7514.Pack, weigh and ship the produce	30	40	-	30	100	20
AGR/N7516.Undertake maintenance of the packhouse, HVAC, tools and equipment	30	40	-	30	100	20
AGR/N9903.Maintain health and safety at the workplace	40	25	-	35	100	5
DGT/VSQ/N0101.Employability Skills (30 Hours)	20	30	-	-	50	5
Total	210	255	-	185	650	100









# **Acronyms**

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training
PPE	Personal Protective Equipment
PPE	Personal Protective Equipment









# 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.