

## Qualification Pack



# Plant Nursery Associate

QP Code: AGR/Q0807

Version: 4.0

NSQF Level: 3

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## Qualification Pack

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## Qualification Pack

### AGR/Q0807: Plant Nursery Associate

#### Brief Job Description

A Plant nursery associate performs various activities outdoors or in a greenhouse such as planting, watering, pruning, and carrying out general care for plants, shrubs, and trees. The person also monitors the whole process from planting to harvesting.

#### Personal Attributes

The individual in this job role must be physically fit. Problem-solving skills along with basic reading, writing and customer service skills are the other important attributes required in this job role.

#### Applicable National Occupational Standards (NOS)

##### Compulsory NOS:

1. [AGR/N0820: Raise, maintain, transplant and harvest seedlings](#)
2. [AGR/N0840: Propagate plants through different methods of propagation](#)
3. [AGR/N0821: Assist in managing plant health and nursery operations](#)
4. [AGR/N9903: Maintain health and safety at the workplace](#)
5. [DGT/VSQ/N0101: Employability Skills \(30 Hours\)](#)

#### Qualification Pack (QP) Parameters

<b>Sector</b>	Agriculture
<b>Sub-Sector</b>	Agriculture Crop Production
<b>Occupation</b>	Landscaping, Gardening and Urban Farming
<b>Country</b>	India
<b>NSQF Level</b>	3
<b>Credits</b>	9
<b>Aligned to NCO/ISCO/ISIC Code</b>	NCO-2015/6113.9900

### Qualification Pack

<b>Minimum Educational Qualification &amp; Experience</b>	10th grade pass (or equivalent) OR 8th grade pass with 3 Years of experience relevant experience in Agriculture and allied sectors OR 5th grade pass with 6 Years of experience relevant experience in Agriculture and allied sectors OR Previous relevant Qualification of NSQF Level (2.5) with 1.5 years of experience relevant experience in Agriculture and allied sectors OR Previous relevant Qualification of NSQF Level (2) with 3 Years of experience relevant experience in Agriculture and allied sectors
<b>Minimum Level of Education for Training in School</b>	
<b>Pre-Requisite License or Training</b>	NA
<b>Minimum Job Entry Age</b>	16 Years
<b>Last Reviewed On</b>	NA
<b>Next Review Date</b>	30/05/2027
<b>NSQC Approval Date</b>	30/05/2024
<b>Version</b>	4.0
<b>Reference code on NQR</b>	QG-03-AG-02605-2024-V2-ASCI
<b>NQR Version</b>	2.0

## Qualification Pack

### AGR/N0820: Raise, maintain, transplant and harvest seedlings

#### Description

This OS unit is about preparing for and raising seedlings in a nursery along with their transplantation.

#### Scope

The scope covers the following :

- Prepare to raise seedlings
- Raise seedlings for transplantation
- Carry out harvesting and post-harvesting activities
- Transplant the seedlings

#### Elements and Performance Criteria

##### *Prepare to raise seedlings*

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

- PC1.** identify the plants and their varieties to be grown according to the season
- PC2.** obtain the seeds of the relevant varieties, fertilizer and other inputs such as poly bags and containers from an authorised seller
- PC3.** sort out the seeds of poor quality
- PC4.** store all the inputs in a safe storage area
- PC5.** organise the necessary tools, implements and Personal Protective Equipment (PPE) for nursery operations

##### *Raise seedlings for transplantation*

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

- PC6.** prepare the correct mixture of soil and manure/ fertilizer
- PC7.** prepare the containers/ poly bags/ germination beds of the appropriate size for planting seeds
- PC8.** fill in the containers/ poly bags with the prepared soil
- PC9.** plant seeds in containers/ poly bags/ germination beds at the depth recommended for the seed variety
- PC10.** water the planted seeds as per the recommended quantity
- PC11.** maintain an appropriate level of moisture and temperature to aid germination of seeds
- PC12.** apply the recommended quantity of fertilizers and insecticides on seedlings while protecting them from damage
- PC13.** arrange for protection of seedlings from excessive heat/ cold and strong winds
- PC14.** store the seedlings in an area with good air circulation
- PC15.** remove dead and unhealthy seedlings as per the Standard Operating Procedure (SOP)
- PC16.** maintain seedlings until they are ready to be transplanted

##### *Carry out harvesting and post-harvesting activities*

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

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- PC17.** harvest seedlings at their appropriate stage of growth
- PC18.** pot the seedlings and label them
- PC19.** dip the cut flowers into a disinfectant appropriately
- PC20.** count the cut flowers into bunches
- PC21.** pack the flowers appropriately in cardboard boxes for being transported

### *Transplant the seedlings*

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

- PC22.** prepare the appropriate type of nursery bed such as sunken bed, level bed, raised bed for transplantation of seedlings
- PC23.** check that the soil is well-fertilized and aerated
- PC24.** create holes of the recommended dimensions in the soil
- PC25.** retrieve the seedlings from containers/ poly bags while protecting them from damage
- PC26.** plant the seedlings in the holes and fill them with soil
- PC27.** apply mulch or compost around the seedlings
- PC28.** water the transplanted seedlings as per the recommended quantity
- PC29.** maintain the record of seedlings transplanted in the nursery

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** applicable record-keeping requirements
- KU2.** correct use of the relevant nursery tools, implements and PPE
- KU3.** various inputs required in nursery operations such as different types of fertilizers, pesticides, containers, poly bags, etc.
- KU4.** safe storage of planting material
- KU5.** preparation of the germination bed and correct mixture of soil and manure/ fertilizer
- KU6.** the depth recommended for planting different varieties of plant seeds in containers/ poly bags/ germination beds
- KU7.** various inputs required in nursery operations such as different types of fertilizers, pesticides, containers, poly bags, etc.
- KU8.** the appropriate level of moisture and temperature to aid germination of seeds
- KU9.** the recommended quantity and correct way of applying insecticides/ pesticides on seedlings
- KU10.** different practices to protect seedlings from excessive heat/ cold and strong winds
- KU11.** conditions required for the healthy growth of seedlings
- KU12.** various inputs required in nursery operations such as different types of fertilizers, pesticides, containers, poly bags, etc.
- KU13.** preparation of soil and nursery bed for transplanting seedlings
- KU14.** the correct method of harvesting and transplanting seedlings
- KU15.** post-harvest processing of flowers

## Generic Skills (GS)



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

- GS1.** write work-related notes and records
- GS2.** read the relevant literature to get information about new developments in the field of work
- GS3.** communicate politely and professionally
- GS4.** listen attentively and comprehend the information given by the speaker
- GS5.** identify possible disruptions to work and take preventive measures
- GS6.** evaluate all possible solutions to a problem to select the best solution
- GS7.** plan and prioritise tasks to ensure timely completion
- GS8.** co-ordinate with the co-workers to achieve the work objectives

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Prepare to raise seedlings</i>	<b>5</b>	<b>10</b>	-	<b>10</b>
<b>PC1.</b> identify the plants and their varieties to be grown according to the season	-	-	-	-
<b>PC2.</b> obtain the seeds of the relevant varieties, fertilizer and other inputs such as poly bags and containers from an authorised seller	-	-	-	-
<b>PC3.</b> sort out the seeds of poor quality	-	-	-	-
<b>PC4.</b> store all the inputs in a safe storage area	-	-	-	-
<b>PC5.</b> organise the necessary tools, implements and Personal Protective Equipment (PPE) for nursery operations	-	-	-	-
<i>Raise seedlings for transplantation</i>	<b>10</b>	<b>10</b>	-	<b>5</b>
<b>PC6.</b> prepare the correct mixture of soil and manure/ fertilizer	-	-	-	-
<b>PC7.</b> prepare the containers/ poly bags/ germination beds of the appropriate size for planting seeds	-	-	-	-
<b>PC8.</b> fill in the containers/ poly bags with the prepared soil	-	-	-	-
<b>PC9.</b> plant seeds in containers/ poly bags/ germination beds at the depth recommended for the seed variety	-	-	-	-
<b>PC10.</b> water the planted seeds as per the recommended quantity	-	-	-	-
<b>PC11.</b> maintain an appropriate level of moisture and temperature to aid germination of seeds	-	-	-	-
<b>PC12.</b> apply the recommended quantity of fertilizers and insecticides on seedlings while protecting them from damage	-	-	-	-
<b>PC13.</b> arrange for protection of seedlings from excessive heat/ cold and strong winds	-	-	-	-



### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC14.</b> store the seedlings in an area with good air circulation	-	-	-	-
<b>PC15.</b> remove dead and unhealthy seedlings as per the Standard Operating Procedure (SOP)	-	-	-	-
<b>PC16.</b> maintain seedlings until they are ready to be transplanted	-	-	-	-
<i>Carry out harvesting and post-harvesting activities</i>	<b>10</b>	<b>10</b>	-	<b>5</b>
<b>PC17.</b> harvest seedlings at their appropriate stage of growth	-	-	-	-
<b>PC18.</b> pot the seedlings and label them	-	-	-	-
<b>PC19.</b> dip the cut flowers into a disinfectant appropriately	-	-	-	-
<b>PC20.</b> count the cut flowers into bunches	-	-	-	-
<b>PC21.</b> pack the flowers appropriately in cardboard boxes for being transported	-	-	-	-
<i>Transplant the seedlings</i>	<b>5</b>	<b>10</b>	-	<b>10</b>
<b>PC22.</b> prepare the appropriate type of nursery bed such as sunken bed, level bed, raised bed for transplantation of seedlings	-	-	-	-
<b>PC23.</b> check that the soil is well-fertilized and aerated	-	-	-	-
<b>PC24.</b> create holes of the recommended dimensions in the soil	-	-	-	-
<b>PC25.</b> retrieve the seedlings from containers/poly bags while protecting them from damage	-	-	-	-
<b>PC26.</b> plant the seedlings in the holes and fill them with soil	-	-	-	-
<b>PC27.</b> apply mulch or compost around the seedlings	-	-	-	-
<b>PC28.</b> water the transplanted seedlings as per the recommended quantity	-	-	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC29.</b> maintain the record of seedlings transplanted in the nursery	-	-	-	-
<b>NOS Total</b>	<b>30</b>	<b>40</b>	<b>-</b>	<b>30</b>

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### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	AGR/N0820
<b>NOS Name</b>	Raise, maintain, transplant and harvest seedlings
<b>Sector</b>	Agriculture
<b>Sub-Sector</b>	Agriculture Crop Production
<b>Occupation</b>	Landscaping, gardening and urban farming
<b>NSQF Level</b>	3
<b>Credits</b>	2
<b>Version</b>	2.0
<b>Last Reviewed Date</b>	30/05/2024
<b>Next Review Date</b>	30/05/2027
<b>NSQC Clearance Date</b>	30/05/2024

## Qualification Pack

### AGR/N0840: Propagate plants through different methods of propagation

#### Description

This OS unit is about propagating plants through a variety of propagation methods.

#### Scope

The scope covers the following :

- Propagate plants through cutting
- Propagate plants through root division
- Propagate plants through layering
- Propagate plants through budding

#### Elements and Performance Criteria

##### *Propagate plants through cutting*

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

- PC1.** arrange the appropriate tools and implements for propagating plants
- PC2.** select a healthy plant to take a cutting from
- PC3.** cut stems of the recommended specifications from the plant
- PC4.** dip the bottom of the cuttings into water mixed with rooting hormone
- PC5.** plant the cuttings into a tray/ container filled with the mixture of soil and river sand
- PC6.** water the cuttings with the recommended quantity at regular intervals
- PC7.** place the planted cuttings in indirect sunlight for the recommended duration
- PC8.** transplant the rooted cuttings into containers of potting soil

##### *Propagate plants through root division*

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

- PC9.** select a healthy and grown plant for root division
- PC10.** loosen the root structure of the plant
- PC11.** cut between the stems using a sharp spade to divide them
- PC12.** plant each division at the same soil level as the original plant to conserve its moisture
- PC13.** apply mulch on the planted divisions
- PC14.** water all new root divisions with the recommended quantity

##### *Propagate plants through layering*

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

- PC15.** select an appropriate method of layering according to the type of plant such as simple layering, tip layering, mound layering, etc.
- PC16.** cover the stem/ tip/ trunk of the plant with soil according to the selected method
- PC17.** apply the recommended quantity of water and fertilizer to support the growth of roots
- PC18.** apply the recommended pesticides/ insecticides to control pests and diseases
- PC19.** maintain the layered plants for the recommended duration before transplanting them

## Qualification Pack

### *Propagate plants through budding*

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

- PC20.** prepare the rootstock using the relevant technique
- PC21.** obtain a bud-stick from a healthy plant with the required characteristics
- PC22.** prepare bud-scion to be inserted into the rootstock
- PC23.** insert bud-scion into the rootstock maintaining it in the recommended position
- PC24.** cut the rootstock above the bud-scion and rootstock union, using pruning shears, to allow new shoots to grow
- PC25.** use a pruning shear to cut the rootstock above the bud-scion and rootstock union to allow new shoots to grow
- PC26.** carry out de-budding and de-suckering as per the SOP
- PC27.** remove the material tying the bud-scion with the rootstock to allow the propagated buds to receive air

### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** correct use of the tools and implements used in propagation activities
- KU2.** the process of propagating plants through a variety of propagation methods such as budding, cutting, layering, root division, etc.
- KU3.** nutrient and disease management of plants during the propagation
- KU4.** common pests and diseases that affect seedlings
- KU5.** different types of fertilizers and pesticides and their safe use
- KU6.** advantage of using mulch to maintain the required level of moisture

### Generic Skills (GS)

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

- GS1.** communicate politely and professionally
- GS2.** make work-related notes to record the relevant information
- GS3.** read and interpret the relevant guides and manuals
- GS4.** listen attentively to comprehend the information given by the speaker
- GS5.** take quick action to deal with any emergencies/ accidents
- GS6.** plan and prioritise tasks to ensure timely completion
- GS7.** identify possible disruptions to work and take preventive measures

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Propagate plants through cutting</i>	<b>5</b>	<b>10</b>	-	<b>5</b>
<b>PC1.</b> arrange the appropriate tools and implements for propagating plants	-	-	-	-
<b>PC2.</b> select a healthy plant to take a cutting from	-	-	-	-
<b>PC3.</b> cut stems of the recommended specifications from the plant	-	-	-	-
<b>PC4.</b> dip the bottom of the cuttings into water mixed with rooting hormone	-	-	-	-
<b>PC5.</b> plant the cuttings into a tray/ container filled with the mixture of soil and river sand	-	-	-	-
<b>PC6.</b> water the cuttings with the recommended quantity at regular intervals	-	-	-	-
<b>PC7.</b> place the planted cuttings in indirect sunlight for the recommended duration	-	-	-	-
<b>PC8.</b> transplant the rooted cuttings into containers of potting soil	-	-	-	-
<i>Propagate plants through root division</i>	<b>10</b>	<b>10</b>	-	<b>10</b>
<b>PC9.</b> select a healthy and grown plant for root division	-	-	-	-
<b>PC10.</b> loosen the root structure of the plant	-	-	-	-
<b>PC11.</b> cut between the stems using a sharp spade to divide them	-	-	-	-
<b>PC12.</b> plant each division at the same soil level as the original plant to conserve its moisture	-	-	-	-
<b>PC13.</b> apply mulch on the planted divisions	-	-	-	-
<b>PC14.</b> water all new root divisions with the recommended quantity	-	-	-	-
<i>Propagate plants through layering</i>	<b>5</b>	<b>10</b>	-	<b>10</b>

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC15.</b> select an appropriate method of layering according to the type of plant such as simple layering, tip layering, mound layering, etc.	-	-	-	-
<b>PC16.</b> cover the stem/ tip/ trunk of the plant with soil according to the selected method	-	-	-	-
<b>PC17.</b> apply the recommended quantity of water and fertilizer to support the growth of roots	-	-	-	-
<b>PC18.</b> apply the recommended pesticides/ insecticides to control pests and diseases	-	-	-	-
<b>PC19.</b> maintain the layered plants for the recommended duration before transplanting them	-	-	-	-
<i>Propagate plants through budding</i>	<b>10</b>	<b>10</b>	-	<b>5</b>
<b>PC20.</b> prepare the rootstock using the relevant technique	-	-	-	-
<b>PC21.</b> obtain a bud-stick from a healthy plant with the required characteristics	-	-	-	-
<b>PC22.</b> prepare bud-scion to be inserted into the rootstock	-	-	-	-
<b>PC23.</b> insert bud-scion into the rootstock maintaining it in the recommended position	-	-	-	-
<b>PC24.</b> cut the rootstock above the bud-scion and rootstock union, using pruning shears, to allow new shoots to grow	-	-	-	-
<b>PC25.</b> use a pruning shear to cut the rootstock above the bud-scion and rootstock union to allow new shoots to grow	-	-	-	-
<b>PC26.</b> carry out de-budding and de-suckering as per the SOP	-	-	-	-
<b>PC27.</b> remove the material tying the bud-scion with the rootstock to allow the propagated buds to receive air	-	-	-	-
<b>NOS Total</b>	<b>30</b>	<b>40</b>	-	<b>30</b>



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### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	AGR/N0840
<b>NOS Name</b>	Propagate plants through different methods of propagation
<b>Sector</b>	Agriculture
<b>Sub-Sector</b>	Agriculture Crop Production
<b>Occupation</b>	Landscaping, Gardening and Urban Farming
<b>NSQF Level</b>	3
<b>Credits</b>	2
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	30/05/2024
<b>Next Review Date</b>	30/05/2027
<b>NSQC Clearance Date</b>	30/05/2024

## Qualification Pack

### AGR/N0821: Assist in managing plant health and nursery operations

#### Description

This OS unit is about monitoring plant health and performing general upkeep of the nursery

#### Scope

The scope covers the following :

- Manage the nutrient requirements of plants
- Protect plants from pests and diseases
- Assist in managing nursery operations
- Optimise resource utilisation
- Maintain effective communication and co-ordination at work

#### Elements and Performance Criteria

##### *Manage the nutrient requirements of plants*

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

- PC1.** identify the nutrient requirements of different types of plants in the nursery
- PC2.** use the appropriate growth medium for the plants such as loamy soil mixed with sand, peat, sawdust etc.
- PC3.** apply the appropriate plant growth regulators such as abscisic acid, gibberellins, cytokinins, ethylene using the recommended application method
- PC4.** apply fertilizers and water on the plants with the recommended quantity at appropriate intervals
- PC5.** carry out trimming and pruning of the plants as per the instructions received
- PC6.** monitor the growth of plants as per the SOP

##### *Protect plants from pests and diseases*

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

- PC7.** identify the pests and diseases that may affect the nursery plants
- PC8.** implement the relevant preventive measures to control pests and diseases
- PC9.** examine the plants regularly to identify any disease and pest infestation
- PC10.** apply the relevant treatment to free the plants from the identified pests/ diseases
- PC11.** maintain the record of the insecticides/ pesticides used on plants

##### *Assist in managing nursery operations*

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

- PC12.** maintain the cleanliness of nursery infrastructure
- PC13.** remove the sources of mosquito breeding
- PC14.** monitor water drainage in the nursery
- PC15.** carry out treatment of waste water as per instructions from the supervisor
- PC16.** use the nursery waste material for composting/ vermi-composting

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- PC17.** follow the planting and maintenance schedules
- PC18.** carry out basic repair and maintenance of the nursery infrastructure, tools and implements
- PC19.** manage the stock of nursery operation inputs
- PC20.** sell the raised seedlings/ plants to customers
- PC21.** maintain various records such as use of plant growth regulators/ fertilizers/ pesticides, plant growth, sales and payments

### *Optimise resource utilisation*

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

- PC22.** optimise usage of water/ electricity/ energy in various tasks/ activities/ processes
- PC23.** connect electrical tools and equipment safely and turn off when not in use
- PC24.** segregate waste into different categories
- PC25.** dispose the non-recyclable waste appropriately
- PC26.** deposit the recyclable and reusable material at the identified location

### *Maintain effective communication and co-ordination at work*

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

- PC27.** co-ordinate with co-workers to achieve organisational goals and deal with emergencies/accidents
- PC28.** maintain work-related information in the prescribed format
- PC29.** report out of authority issues to the supervisor

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** relevant documentation and record-keeping requirements
- KU2.** importance of customer-centric approach and customer-service skills
- KU3.** various plant health and pest/ disease management practices
- KU4.** different types of plant growth regulators and their correct use
- KU5.** basic repair and maintenance process of nursery infrastructure
- KU6.** importance of following environmental and ecological best practices to minimise the impact on the environment
- KU7.** benefits and methods of resource optimisation
- KU8.** ways of efficiently managing various materials used in greenhouse operations
- KU9.** common practices of conserving electricity
- KU10.** different methods of recycling and disposing waste
- KU11.** common sources of pollution and ways to minimise it
- KU12.** procedure for seeking guidance and work-related information and clarification
- KU13.** available means of communication at the workplace
- KU14.** importance of information sharing

## Generic Skills (GS)

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

- GS1.** note the information communicated
- GS2.** read and understand the relevant guides and manuals
- GS3.** communicate politely and professionally
- GS4.** listen attentively to understand the information/ instructions being shared
- GS5.** take quick decision to deal with work-related emergencies/ accidents
- GS6.** plan and prioritise tasks for effective time-management
- GS7.** listen attentively to understand the information/ instructions being shared

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### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Manage the nutrient requirements of plants</i>	<b>4</b>	<b>8</b>	-	<b>4</b>
<b>PC1.</b> identify the nutrient requirements of different types of plants in the nursery	-	-	-	-
<b>PC2.</b> use the appropriate growth medium for the plants such as loamy soil mixed with sand, peat, sawdust etc.	-	-	-	-
<b>PC3.</b> apply the appropriate plant growth regulators such as abscisic acid, gibberellins, cytokinins, ethylene using the recommended application method	-	-	-	-
<b>PC4.</b> apply fertilizers and water on the plants with the recommended quantity at appropriate intervals	-	-	-	-
<b>PC5.</b> carry out trimming and pruning of the plants as per the instructions received	-	-	-	-
<b>PC6.</b> monitor the growth of plants as per the SOP	-	-	-	-
<i>Protect plants from pests and diseases</i>	<b>6</b>	<b>10</b>	-	<b>10</b>
<b>PC7.</b> identify the pests and diseases that may affect the nursery plants	-	-	-	-
<b>PC8.</b> implement the relevant preventive measures to control pests and diseases	-	-	-	-
<b>PC9.</b> examine the plants regularly to identify any disease and pest infestation	-	-	-	-
<b>PC10.</b> apply the relevant treatment to free the plants from the identified pests/ diseases	-	-	-	-
<b>PC11.</b> maintain the record of the insecticides/ pesticides used on plants	-	-	-	-
<i>Assist in managing nursery operations</i>	<b>6</b>	<b>10</b>	-	<b>10</b>
<b>PC12.</b> maintain the cleanliness of nursery infrastructure	-	-	-	-
<b>PC13.</b> remove the sources of mosquito breeding	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC14.</b> monitor water drainage in the nursery	-	-	-	-
<b>PC15.</b> carry out treatment of waste water as per instructions from the supervisor	-	-	-	-
<b>PC16.</b> use the nursery waste material for composting/ vermi-composting	-	-	-	-
<b>PC17.</b> follow the planting and maintenance schedules	-	-	-	-
<b>PC18.</b> carry out basic repair and maintenance of the nursery infrastructure, tools and implements	-	-	-	-
<b>PC19.</b> manage the stock of nursery operation inputs	-	-	-	-
<b>PC20.</b> sell the raised seedlings/ plants to customers	-	-	-	-
<b>PC21.</b> maintain various records such as use of plant growth regulators/ fertilizers/ pesticides, plant growth, sales and payments	-	-	-	-
<i>Optimise resource utilisation</i>	<b>6</b>	<b>6</b>	-	<b>2</b>
<b>PC22.</b> optimise usage of water/ electricity/ energy in various tasks/ activities/ processes	-	-	-	-
<b>PC23.</b> connect electrical tools and equipment safely and turn off when not in use	-	-	-	-
<b>PC24.</b> segregate waste into different categories	-	-	-	-
<b>PC25.</b> dispose the non-recyclable waste appropriately	-	-	-	-
<b>PC26.</b> deposit the recyclable and reusable material at the identified location	-	-	-	-
<i>Maintain effective communication and co-ordination at work</i>	<b>8</b>	<b>6</b>	-	<b>4</b>
<b>PC27.</b> co-ordinate with co-workers to achieve organisational goals and deal with emergencies/accidents	-	-	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC28.</b> maintain work-related information in the prescribed format	-	-	-	-
<b>PC29.</b> report out of authority issues to the supervisor	-	-	-	-
<b>NOS Total</b>	<b>30</b>	<b>40</b>	<b>-</b>	<b>30</b>



## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	AGR/N0821
<b>NOS Name</b>	Assist in managing plant health and nursery operations
<b>Sector</b>	Agriculture
<b>Sub-Sector</b>	Agriculture Crop Production
<b>Occupation</b>	Landscaping, gardening and urban farming
<b>NSQF Level</b>	3
<b>Credits</b>	1
<b>Version</b>	3.0
<b>Last Reviewed Date</b>	30/05/2024
<b>Next Review Date</b>	30/05/2027
<b>NSQC Clearance Date</b>	30/05/2024

## Qualification Pack

### 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:

## Qualification Pack

- 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

## Qualification Pack

- 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

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Maintain personal hygiene</i>	<b>10</b>	<b>5</b>	-	<b>10</b>
<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	-	-	-	-
<i>Maintain clean and safe workplace</i>	<b>15</b>	<b>15</b>	-	<b>15</b>
<b>PC5.</b> carry out basic safety checks before operation of all tools, implements, and machinery and report identified hazards to the supervisor	-	-	-	-
<b>PC6.</b> 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	-	-	-	-

### Qualification Pack

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	-	-	-	-
<b>PC15.</b> follow government / workplace advisories incase of outbreak of any disease/disaster	-	-	-	-
<i>Administer appropriate emergency procedures</i>	<b>15</b>	<b>5</b>	-	<b>10</b>
<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	-	-	-	-
<b>NOS Total</b>	<b>40</b>	<b>25</b>	-	<b>35</b>

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	AGR/N9903
<b>NOS Name</b>	Maintain health and safety at the workplace
<b>Sector</b>	Agriculture
<b>Sub-Sector</b>	Generic
<b>Occupation</b>	Generic
<b>NSQF Level</b>	4
<b>Credits</b>	1
<b>Version</b>	4.0
<b>Last Reviewed Date</b>	30/05/2024
<b>Next Review Date</b>	30/05/2027
<b>NSQC Clearance Date</b>	30/05/2024



## Qualification Pack

### 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

## Qualification Pack

### *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

## Qualification Pack

- 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

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Introduction to Employability Skills</i>	<b>1</b>	<b>1</b>	-	-
<b>PC1.</b> understand the significance of employability skills in meeting the job requirements	-	-	-	-
<i>Constitutional values - Citizenship</i>	<b>1</b>	<b>1</b>	-	-
<b>PC2.</b> identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices	-	-	-	-
<i>Becoming a Professional in the 21st Century</i>	<b>1</b>	<b>3</b>	-	-
<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.	-	-	-	-
<i>Basic English Skills</i>	<b>2</b>	<b>3</b>	-	-
<b>PC4.</b> speak with others using some basic English phrases or sentences	-	-	-	-
<i>Communication Skills</i>	<b>1</b>	<b>1</b>	-	-
<b>PC5.</b> follow good manners while communicating with others	-	-	-	-
<b>PC6.</b> work with others in a team	-	-	-	-
<i>Diversity &amp; Inclusion</i>	<b>1</b>	<b>1</b>	-	-
<b>PC7.</b> communicate and behave appropriately with all genders and PwD	-	-	-	-
<b>PC8.</b> report any issues related to sexual harassment	-	-	-	-
<i>Financial and Legal Literacy</i>	<b>3</b>	<b>4</b>	-	-
<b>PC9.</b> use various financial products and services safely and securely	-	-	-	-

### Qualification Pack

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

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	DGT/VSQ/N0101
<b>NOS Name</b>	Employability Skills (30 Hours)
<b>Sector</b>	Cross Sectoral
<b>Sub-Sector</b>	Professional Skills
<b>Occupation</b>	Employability
<b>NSQF Level</b>	2
<b>Credits</b>	1
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	30/05/2024
<b>Next Review Date</b>	30/05/2027
<b>NSQC Clearance Date</b>	30/05/2024

## Assessment Guidelines and Assessment Weightage

### Assessment Guidelines

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.

The assessment for the theory part will be based on knowledge bank of questions created by the SSC.

Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below).

Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training center based on these criteria.

## Qualification Pack

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.

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
AGR/N0820.Raise, maintain, transplant and harvest seedlings	30	40	-	30	100	30
AGR/N0840.Propagate plants through different methods of propagation	30	40	-	30	100	25
AGR/N0821.Assist in managing plant health and nursery operations	30	40	0	30	100	30
AGR/N9903.Maintain health and safety at the workplace	40	25	-	35	100	10
DGT/VSQ/N0101.Employability Skills (30 Hours)	20	30	-	-	50	5
<b>Total</b>	<b>150</b>	<b>175</b>	<b>-</b>	<b>125</b>	<b>450</b>	<b>100</b>



## Qualification Pack

### Acronyms

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

## Qualification Pack

### Glossary

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

## Qualification Pack

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