

Qualification Pack



Garden Keeper

QP Code: AGR/Q0814

Version: 1.0

NSQF Level: 2

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AGR/Q0814: Garden Keeper

Brief Job Description

A Garden Keeper is responsible for planting and maintaining lawns and gardens in private and public properties such as homes, parks and hotels. The individual uses a variety of tools and equipment for this purpose and carries out their basic repair and maintenance also.

Personal Attributes

The individual should have love and inclination for plants and nature and stamina to work for long duration in outdoor settings. The person must be able to work independently and take relevant decisions. Problem-solving skills along with basic reading, writing and communication skills are other important attributes required in this role.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. [AGR/N0852: Prepare saplings for transplanting in the garden](#)
2. [AGR/N0853: Set the garden as per the plan](#)
3. [AGR/N0854: Undertake maintenance of the garden](#)
4. [AGR/N0855: Setup and maintain a rooftop garden](#)
5. [DGT/VSQ/N0101: Employability Skills \(30 Hours\)](#)

Qualification Pack (QP) Parameters

Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Landscaping, Gardening and Urban Farming
Country	India
NSQF Level	2
Credits	7
Aligned to NCO/ISCO/ISIC Code	NCO-2015/6113.0301

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Minimum Educational Qualification & Experience	No formal education prescribed with NA of experience
Minimum Level of Education for Training in School	9th Class
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years
Last Reviewed On	NA
Next Review Date	29/09/2026
NSQC Approval Date	29/09/2023
Version	1.0
Reference code on NQR	QG-02-AG-01004-2023-V1-ASCI
NQR Version	1.0

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AGR/N0852: Prepare saplings for transplanting in the garden

Description

This unit deals with management of nursery and propagation of planting materials using different methods.

Scope

The scope covers the following :

- Prepare for nursery operations
- Prepare the nursery bed
- Propagate saplings through seeds
- Propagate plants through cutting, root division, layering and budding

Elements and Performance Criteria

Prepare for nursery operations

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

- PC1.** • select the relevant varieties of plants to grow in the garden as per the season and client preferences
- PC2.** • arrange the plant seeds, fertilizer, insecticides/ pesticides and poly bags/ containers to raise saplings
- PC3.** ensure the availability of water and electricity for nursery operations
- PC4.** • organise the necessary tools, implements and Personal Protective Equipment (PPE) for nursery operations
- PC5.** construct the shade net house, store-room, compost area, etc
- PC6.** • erect framed structures such as poly-tunnels, hardening chamber, mist chamber for plant propagation
- PC7.** prepare farmyard manure or compost as per the Standard Operating Procedure (SOP)
- PC8.** conduct a soil test to identify the soil treatment requirements
- PC9.** apply the necessary treatment on the soil as per the requirement

Prepare the nursery bed

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

- PC10.** dry plough the nursery field as required
- PC11.** • apply fertilizers, farmyard manure or compost uniformly on the field in the recommended quantity
- PC12.** water the field with the recommended quantity of water
- PC13.** puddle the field for the recommended duration of time
- PC14.** level the field using an appropriate implement

Propagate saplings through seeds

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

- PC15.** sort out the poor-quality/ damaged seeds

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- PC16.** fill in the poly bags and containers with the recommended quantity of treated soil
- PC17.** carry out pre-sowing treatment of the seeds
- PC18.** create raised, level or sunken seedbed according to the local conditions
- PC19.** sow seeds in the seedbed, poly bags and containers at the recommended depth
- PC20.** • apply the recommended quantity of water and manure/ fertilizer on the sown seeds as per
• the SOP
- PC21.** maintain saplings in the seedbed/ poly bags/ containers for the recommended period
- PC22.** acclimatise the saplings before transplanting
- Propagate plants through cutting, root division, layering and budding*
- To be competent, the user/individual on the job must be able to:
- PC23.** select a healthy plant to take cutting from
- PC24.** extract stems of the recommended specifications from the plant
- PC25.** • use the stems to propagate plants maintaining the required level of moisture and sunlight
• exposure
- PC26.** select a healthy and grown plant for root division
- PC27.** create root divisions from the plant's root
- PC28.** use the root divisions to propagate plants maintaining the recommended environment
- PC29.** select an appropriate method of layering according to the type of plant
- PC30.** cover the stem / tip / trunk of the plant with soil according to the selected method
- PC31.** apply the recommended quantity of water and fertilizer to support the growth of roots
- PC32.** prepare a rootstock for budding
- PC33.** cut a bud-stick from a healthy and disease-free plant with the required characteristics
- PC34.** prepare and use bud-scion to propagate plants
- PC35.** apply the approved pesticides/ insecticides to protect the plants from pests and diseases
- PC36.** maintain the record of nursery operations

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** applicable record-keeping requirements in the job role
- KU2.** resources required for setting up a nursery
- KU3.** • construction of the nursery infrastructure such as shade net house, store-room, compost
• area, etc.
- KU4.** how to erect and use poly-tunnels, hardening chamber, mist chamber, etc
- KU5.** propagation of plants using seeds
- KU6.** different methods of plant propagation such as root division, seeding, cutting, layering, etc.
- KU7.** how to conduct a soil test to identify soil treatment requirements
- KU8.** types of seedbed such as raised/ level/ sunken
- KU9.** the process of preparing a nursery bed and seedbed
- KU10.** variety of material required for propagating plants in a nursery
- KU11.** relevant tools and equipment and their correct use

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KU12. safe use of fertilizers, pesticides and insecticides

KU13. water requirements of different types of saplings

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 with co-workers and clients

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 the work objectives

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Prepare for nursery operations</i>	6	8	-	8
PC1. • select the relevant varieties of plants to grow in the garden as per the season and client • preferences	-	-	-	-
PC2. • arrange the plant seeds, fertilizer, insecticides/ pesticides and poly bags/ containers to raise • saplings	-	-	-	-
PC3. ensure the availability of water and electricity for nursery operations	-	-	-	-
PC4. • organise the necessary tools, implements and Personal Protective Equipment (PPE) for • nursery operations	-	-	-	-
PC5. construct the shade net house, store-room, compost area, etc	-	-	-	-
PC6. • erect framed structures such as poly-tunnels, hardening chamber, mist chamber for plant • propagation	-	-	-	-
PC7. prepare farmyard manure or compost as per the Standard Operating Procedure (SOP)	-	-	-	-
PC8. conduct a soil test to identify the soil treatment requirements	-	-	-	-
PC9. apply the necessary treatment on the soil as per the requirement	-	-	-	-
<i>Prepare the nursery bed</i>	8	12	-	8
PC10. dry plough the nursery field as required	-	-	-	-
PC11. • apply fertilizers, farmyard manure or compost uniformly on the field in the recommended • quantity	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. water the field with the recommended quantity of water	-	-	-	-
PC13. puddle the field for the recommended duration of time	-	-	-	-
PC14. level the field using an appropriate implement	-	-	-	-
<i>Propagate saplings through seeds</i>	8	10	-	8
PC15. sort out the poor-quality/ damaged seeds	-	-	-	-
PC16. fill in the poly bags and containers with the recommended quantity of treated soil	-	-	-	-
PC17. carry out pre-sowing treatment of the seeds	-	-	-	-
PC18. create raised, level or sunken seedbed according to the local conditions	-	-	-	-
PC19. sow seeds in the seedbed, poly bags and containers at the recommended depth	-	-	-	-
PC20. • apply the recommended quantity of water and manure/ fertilizer on the sown seeds as per • the SOP	-	-	-	-
PC21. maintain saplings in the seedbed/ poly bags/ containers for the recommended period	-	-	-	-
PC22. acclimatise the saplings before transplanting	-	-	-	-
<i>Propagate plants through cutting, root division, layering and budding</i>	8	10	-	6
PC23. select a healthy plant to take cutting from	-	-	-	-
PC24. extract stems of the recommended specifications from the plant	-	-	-	-
PC25. • use the stems to propagate plants maintaining the required level of moisture and sunlight • exposure	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC26. select a healthy and grown plant for root division	-	-	-	-
PC27. create root divisions from the plant's root	-	-	-	-
PC28. use the root divisions to propagate plants maintaining the recommended environment	-	-	-	-
PC29. select an appropriate method of layering according to the type of plant	-	-	-	-
PC30. cover the stem / tip / trunk of the plant with soil according to the selected method	-	-	-	-
PC31. apply the recommended quantity of water and fertilizer to support the growth of roots	-	-	-	-
PC32. prepare a rootstock for budding	-	-	-	-
PC33. cut a bud-stick from a healthy and disease-free plant with the required characteristics	-	-	-	-
PC34. prepare and use bud-scion to propagate plants	-	-	-	-
PC35. apply the approved pesticides/ insecticides to protect the plants from pests and diseases	-	-	-	-
PC36. maintain the record of nursery operations	-	-	-	-
NOS Total	30	40	-	30

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National Occupational Standards (NOS) Parameters

NOS Code	AGR/N0852
NOS Name	Prepare saplings for transplanting in the garden
Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Landscaping, Gardening and Urban Farming
NSQF Level	2
Credits	2
Version	1.0
Last Reviewed Date	29/09/2023
Next Review Date	29/09/2026
NSQC Clearance Date	29/09/2023

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AGR/N0853: Set the garden as per the plan

Description

This OS unit about setting up a garden as per the client requirements.

Scope

The scope covers the following :

- Prepare the field for planting
- Plant the garden
- Set up garden features and irrigation or fertigation system
- Prepare the flower bed
- Optimise resource utilisation

Elements and Performance Criteria

Prepare the field for planting

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

- PC1.** remove all roots, debris and waste material from the land
- PC2.** examine the soil for an appropriate level of moisture for tilling
- PC3.** till the land to the required depth
- PC4.** apply the necessary treatment on the soil such as relevant chemicals, peat, lime, manure, compost, etc.
- PC5.** identify and remove weeds from the land
- PC6.** ensure the soil is well-drained and there is no accumulation of water in the land
- PC7.** prepare rows and holes for planting seeds/ plants as per the planned layout
- PC8.** ensure the holes are deep and wide enough to support healthy plant growth
- PC9.** arrange for drainage of water from the garden

Plant the garden

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

- PC10.** plant trees/ plants/ shrubs/ grass/ hedges and edges in the selected pattern maintaining the required spacing
- PC11.** apply soil cover on the planted roots of the trees/ plants/ shrubs/ grass/ hedges and edges
- PC12.** water the trees/ plants/ shrubs/ grass/ hedges and edges with the recommended quantity of water
- PC13.** apply an appropriate type of fertilizer/ manure/ mulch on the roots of the hedges and edges
- PC14.** install supports for the relevant types of plants to help them grow as intended
- PC15.** erect fences around the garden to protect it from animals
- PC16.** identify the types of annual plants to grow
- PC17.** obtain the seeds of the selected plants
- PC18.** sort out damaged and unhealthy seeds

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- PC19.** plant the seeds as per the SOP
- PC20.** water the planted seeds with the recommended quantity
- PC21.** install support to allow tender plants to grow straight
- PC22.** identify the appropriate vegetable, fruits and indoor plants to grow
- PC23.** prepare potting mixture using the recommended ingredients
- PC24.** plant the vegetables and fruit plants
- PC25.** plant bonsai trees in pots of the appropriate size
- PC26.** carry out potting and repotting for the optimum growth of potted plants

Set up garden features and irrigation or fertigation system

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

- PC27.** set up an appropriate irrigation system such as drip irrigation, sprinkler irrigation, subsurface irrigation
- PC28.** install a fertigation system as per the requirement
- PC29.** install various garden features such as walkways, statues, fountain as per the layout

Prepare the flower bed

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

- PC30.** identify a spot with sufficient exposure to sunlight
- PC31.** remove any existing grass/ plants/ debris from the spot
- PC32.** drain out any water accumulated in the spot
- PC33.** ensure the soil has the correct level of moisture
- PC34.** till the soil to the recommended depth
- PC35.** prepare the flower bed as per the Standard Operating Procedure (SOP)
- PC36.** plant flowering plants such as bulbs, orchids, succulents, cacti in combination with bedding plants
- PC37.** maintain the recommended spacing between plants

Optimise resource utilisation

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

- PC38.** optimise the usage of various material in different tasks / processes
- PC39.** optimise the usage of water/ electricity/ relevant materials in various tasks / processes
- PC40.** connect electrical tools and equipment safely and turn off when not in use

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** correct method and depth of tilling a field for gardening
- KU2.** various material used for treating garden soil such as relevant chemicals, peat, lime, manure, compost, etc.
- KU3.** planting of various types of trees/ plants/ shrubs/ hedges and edges in a garden
- KU4.** importance of having effective drainage in the garden
- KU5.** safe handling of planting material
- KU6.** the process of preparing a nursery bed

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- KU7.** installation of different types of irrigation systems such as drip irrigation, sprinkler irrigation, subsurface irrigation, etc.
- KU8.** different garden features and their installation process
- KU9.** the installation process of a fertigation system and its advantages
- KU10.** process of preparing a flower bed
- KU11.** method of growing annual plants, fruits, vegetables and indoor plants
- KU12.** importance of following environmental and ecological best practices to minimise the impact on the environment
- KU13.** benefits of resource optimisation
- KU14.** ways of efficiently managing various materials used in greenhouse operations
- KU15.** common practices of conserving electricity

Generic Skills (GS)

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

- GS1.** read relevant literature to get updated information about the field of work
- GS2.** write work-related notes
- GS3.** listen attentively to understand the client requirements
- GS4.** communicate professionally and politely
- GS5.** plan and schedule tasks for effective time management
- GS6.** co-ordinate with the co-workers and supervisor to achieve work objectives
- GS7.** evaluate all possible solutions to a problem before choosing the best one
- GS8.** take quick decisions to deal with any emergencies/ accidents

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Prepare the field for planting</i>	6	8	-	6
PC1. remove all roots, debris and waste material from the land	-	-	-	-
PC2. examine the soil for an appropriate level of moisture for tilling	-	-	-	-
PC3. till the land to the required depth	-	-	-	-
PC4. apply the necessary treatment on the soil such as relevant chemicals, peat, lime, manure, compost, etc.	-	-	-	-
PC5. identify and remove weeds from the land	-	-	-	-
PC6. ensure the soil is well-drained and there is no accumulation of water in the land	-	-	-	-
PC7. prepare rows and holes for planting seeds/ plants as per the planned layout	-	-	-	-
PC8. ensure the holes are deep and wide enough to support healthy plant growth	-	-	-	-
PC9. arrange for drainage of water from the garden	-	-	-	-
<i>Plant the garden</i>	10	14	-	10
PC10. plant trees/ plants/ shrubs/ grass/ hedges and edges in the selected pattern maintaining the required spacing	-	-	-	-
PC11. apply soil cover on the planted roots of the trees/ plants/ shrubs/ grass/ hedges and edges	-	-	-	-
PC12. water the trees/ plants/ shrubs/ grass/ hedges and edges with the recommended quantity of water	-	-	-	-
PC13. apply an appropriate type of fertilizer/ manure/ mulch on the roots of the hedges and edges	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC14. install supports for the relevant types of plants to help them grow as intended	-	-	-	-
PC15. erect fences around the garden to protect it from animals	-	-	-	-
PC16. identify the types of annual plants to grow	-	-	-	-
PC17. obtain the seeds of the selected plants	-	-	-	-
PC18. sort out damaged and unhealthy seeds	-	-	-	-
PC19. plant the seeds as per the SOP	-	-	-	-
PC20. water the planted seeds with the recommended quantity	-	-	-	-
PC21. install support to allow tender plants to grow straight	-	-	-	-
PC22. identify the appropriate vegetable, fruits and indoor plants to grow	-	-	-	-
PC23. prepare potting mixture using the recommended ingredients	-	-	-	-
PC24. plant the vegetables and fruit plants	-	-	-	-
PC25. plant bonsai trees in pots of the appropriate size	-	-	-	-
PC26. carry out potting and repotting for the optimum growth of potted plants	-	-	-	-
<i>Set up garden features and irrigation or fertigation system</i>	5	7	-	5
PC27. set up an appropriate irrigation system such as drip irrigation, sprinkler irrigation, subsurface irrigation	-	-	-	-
PC28. install a fertigation system as per the requirement	-	-	-	-
PC29. install various garden features such as walkways, statues, fountain as per the layout	-	-	-	-
<i>Prepare the flower bed</i>	5	8	-	5

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC30. identify a spot with sufficient exposure to sunlight	-	-	-	-
PC31. remove any existing grass/ plants/ debris from the spot	-	-	-	-
PC32. drain out any water accumulated in the spot	-	-	-	-
PC33. ensure the soil has the correct level of moisture	-	-	-	-
PC34. till the soil to the recommended depth	-	-	-	-
PC35. prepare the flower bed as per the Standard Operating Procedure (SOP)	-	-	-	-
PC36. plant flowering plants such as bulbs, orchids, succulents, cacti in combination with bedding plants	-	-	-	-
PC37. maintain the recommended spacing between plants	-	-	-	-
<i>Optimise resource utilisation</i>	4	3	-	4
PC38. optimise the usage of various material in different tasks / processes	-	-	-	-
PC39. optimise the usage of water/ electricity/ relevant materials in various tasks / processes	-	-	-	-
PC40. connect electrical tools and equipment safely and turn off when not in use	-	-	-	-
NOS Total	30	40	-	30

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National Occupational Standards (NOS) Parameters

NOS Code	AGR/N0853
NOS Name	Set the garden as per the plan
Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Landscaping, Gardening and Urban Farming
NSQF Level	2
Credits	1
Version	1.0
Last Reviewed Date	29/09/2023
Next Review Date	29/09/2026
NSQC Clearance Date	29/09/2023

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AGR/N0854: Undertake maintenance of the garden

Description

This OS unit is about carrying out various activities to maintain a garden.

Scope

The scope covers the following :

- Perform plant nutrition management
- Perform pest and disease management
- Carry out training, pruning and mowing
- Control weeds in the garden
- Maintain the irrigation/ fertigation system
- Carry out general maintenance of the garden
- Perform waste management

Elements and Performance Criteria

Perform plant nutrition management

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

- PC1.** water garden plants/ trees/ shrubs/ grass/ hedges and edges with the recommended quantity of water
- PC2.** apply the recommended quantity of fertilizers/ manure at appropriate intervals
- PC3.** maintain the appropriate moisture and sunlight exposure for different varieties of plants/ trees/ shrubs/ grass/ hedges and edges

Perform pest and disease management

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

- PC4.** examine the garden plants/ trees/ shrubs/ grass/ hedges and edges for signs of pests and diseases
- PC5.** apply the approved insecticides/ pesticides as per the manufacturer's instructions
- PC6.** maintain the record of insecticides/ pesticides used in the garden

Carry out training, pruning and mowing

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

- PC7.** check the garden plants/ trees/ shrubs/ grass/ hedges and edges to identify their training and pruning needs
- PC8.** carry out pruning using the appropriate tools such as shears, pruners, or chain saw etc.
- PC9.** train the relevant plants, trees/ shrubs/ hedges and edges using the recommended training methods
- PC10.** dehead the dead flowers from the flower bed
- PC11.** mow the lawn as per the maintenance schedule

Control weeds in the garden

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

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- PC12.** apply mulch in the garden to prevent weed growth
- PC13.** identify different types of weed growth in the garden
- PC14.** remove weeds using the recommended methods and tools

Maintain the irrigation/ fertigation system

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

- PC15.** check the irrigation/ fertigation system installed in the garden for any repair and maintenance needs
- PC16.** carry out regular repair and maintenance of the irrigation/ fertigation system
- PC17.** co-ordinate with an expert for complex repair and maintenance needs

Carry out general maintenance

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

- PC18.** maintain cleanliness of the garden and its features
- PC19.** rake the dead leaves and debris from the lawn
- PC20.** drain out the accumulated water from the garden
- PC21.** carry out minor repair and maintenance of the gardening tools and equipment

Perform waste management

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

- PC22.** segregate waste into different categories
- PC23.** dispose the non-recyclable waste appropriately
- PC24.** deposit the recyclable and reusable material at the identified location

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** safe use of fertilizers, pesticides and insecticides
- KU2.** correct use and common repair/ maintenance of various garden tools and equipment
- KU3.** macro and micro nutrient management of various types of horticultural plants/ trees/ shrubs/ hedges and edges
- KU4.** methods of training and pruning a variety of plants/ trees/ shrubs/ hedges and edges
- KU5.** repair and maintenance of different types of irrigation/ fertigation systems
- KU6.** integrated pest and disease management for horticultural plants/ trees/ shrubs/ hedges and edges
- KU7.** various weed control methods
- KU8.** maintenance of flower beds, annual plants, vegetables, fruit trees and indoor plants
- KU9.** lawn maintenance requirements
- KU10.** different methods of recycling and disposing waste
- KU11.** common sources of pollution and ways to minimise it

Generic Skills (GS)

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

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- GS1.** write work-related notes
- GS2.** read the relevant guides and manuals
- GS3.** listen attentively to understand the client requirements
- GS4.** communicate professionally and politely
- GS5.** plan and schedule tasks for effective time management
- GS6.** co-ordinate with the co-workers to achieve work objectives
- GS7.** identify possible disruptions to work and take preventive measures
- GS8.** evaluate all possible solutions to a problem before choosing the best one
- GS9.** take quick action to deal with any emergencies/ accidents

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Perform plant nutrition management</i>	4	6	-	10
PC1. water garden plants/ trees/ shrubs/ grass/ hedges and edges with the recommended quantity of water	-	-	-	-
PC2. apply the recommended quantity of fertilizers/ manure at appropriate intervals	-	-	-	-
PC3. maintain the appropriate moisture and sunlight exposure for different varieties of plants/ trees/ shrubs/ grass/ hedges and edges	-	-	-	-
<i>Perform pest and disease management</i>	4	2	-	4
PC4. examine the garden plants/ trees/ shrubs/ grass/ hedges and edges for signs of pests and diseases	-	-	-	-
PC5. apply the approved insecticides/ pesticides as per the manufacturer's instructions	-	-	-	-
PC6. maintain the record of insecticides/ pesticides used in the garden	-	-	-	-
<i>Carry out training, pruning and mowing</i>	4	6	-	4
PC7. check the garden plants/ trees/ shrubs/ grass/ hedges and edges to identify their training and pruning needs	-	-	-	-
PC8. carry out pruning using the appropriate tools such as shears, pruners, or chain saw etc.	-	-	-	-
PC9. train the relevant plants, trees/ shrubs/ hedges and edges using the recommended training methods	-	-	-	-
PC10. dehead the dead flowers from the flower bed	-	-	-	-
PC11. mow the lawn as per the maintenance schedule	-	-	-	-
<i>Control weeds in the garden</i>	4	6	-	4

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. apply mulch in the garden to prevent weed growth	-	-	-	-
PC13. identify different types of weed growth in the garden	-	-	-	-
PC14. remove weeds using the recommended methods and tools	-	-	-	-
<i>Maintain the irrigation/ fertigation system</i>	6	8	-	4
PC15. check the irrigation/ fertigation system installed in the garden for any repair and maintenance needs	-	-	-	-
PC16. carry out regular repair and maintenance of the irrigation/ fertigation system	-	-	-	-
PC17. co-ordinate with an expert for complex repair and maintenance needs	-	-	-	-
<i>Carry out general maintenance</i>	4	6	-	2
PC18. maintain cleanliness of the garden and its features	-	-	-	-
PC19. rake the dead leaves and debris from the lawn	-	-	-	-
PC20. drain out the accumulated water from the garden	-	-	-	-
PC21. carry out minor repair and maintenance of the gardening tools and equipment	-	-	-	-
<i>Perform waste management</i>	4	6	-	2
PC22. segregate waste into different categories	-	-	-	-
PC23. dispose the non-recyclable waste appropriately	-	-	-	-
PC24. deposit the recyclable and reusable material at the identified location	-	-	-	-
NOS Total	30	40	-	30

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	AGR/N0854
NOS Name	Undertake maintenance of the garden
Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Landscaping, Gardening and Urban Farming
NSQF Level	2
Credits	2
Version	1.0
Last Reviewed Date	29/09/2023
Next Review Date	29/09/2026
NSQC Clearance Date	29/09/2023

Qualification Pack

AGR/N0855: Setup and maintain a rooftop garden

Description

This OS unit is about designing, setting up and maintaining a rooftop garden.

Scope

The scope covers the following :

- Plan the rooftop garden
- Set up the rooftop garden
- Maintain the rooftop garden

Elements and Performance Criteria

Plan the rooftop garden

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

- PC1.** check if a rooftop garden is permitted as per the local legislation in the proposed area
- PC2.** assess the roof's loading capacity with the help of a structural engineer/ architect
- PC3.** ensure that there are no major installations or structures on the roof that may cause obstruction
- PC4.** assess the climatic conditions at the site to establish suitability for planting a rooftop garden
- PC5.** obtain the necessary approvals for the rooftop garden design
- PC6.** check that the building has an effective drainage system
- PC7.** assess the sunlight and wind exposure at the roof
- PC8.** check for adequate availability of water at the roof
- PC9.** measure the available space for the purpose of designing the rooftop garden
- PC10.** plan the placement of plants, furniture and garden features
- PC11.** select heat and drought tolerant plants, trees and shrubs of appropriate weight and size for the rooftop garden
- PC12.** select the appropriate material such as plastic, fiberglass or foam planting containers according to the roof's loading capacity
- PC13.** prepare a detailed plan through discussion with the client
- PC14.** estimate the cost of setting up the rooftop garden

Set up the rooftop garden

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

- PC15.** arrange the necessary plants/ shrubs, material, tools and equipment for setting up the rooftop garden
- PC16.** prepare lightweight potting soil for planting plants, trees and shrubs
- PC17.** plant the trees, plants and shrubs as per the SOP
- PC18.** water the plants and shrubs with the recommended quantity of water
- PC19.** install windbreaks, appropriate support and shading for the plants, trees and shrubs

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- PC20.** apply fertilizers in the recommended quantity
- PC21.** install an irrigation system for watering the plants
- PC22.** carry out waterproofing of the roof garden
- PC23.** arrange for safe drainage of water from the garden
- PC24.** install garden features and furniture of appropriate weight and size as per the garden plan

Maintain the rooftop garden

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

- PC25.** apply mulch on the plants to stabilise evaporation and control weed
- PC26.** examine plants, trees and shrubs for healthy growth and pest and disease infestation
- PC27.** apply fertilizers, manure and pesticides/ insecticides in the recommended quantity at appropriate intervals
- PC28.** train plants and shrubs as per the requirement
- PC29.** prune plants, trees and shrubs to ensure their healthy growth and aesthetics
- PC30.** remove weeds as per the SOP
- PC31.** carry out repair and maintenance of the garden pots, features, irrigation and drainage system
- PC32.** maintain record of the maintenance activities

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** applicable documentation and record-keeping requirements
- KU2.** various parameters to assess while planning a rooftop a garden
- KU3.** importance of evaluating loading capacity of the roof before setting up the rooftop garden
- KU4.** how to assess the roof's loading capacity with the help of a structural engineer/ architect.
- KU5.** different ways of waterproofing a rooftop garden
- KU6.** various landscaping practices for the beautification of rooftop gardens including garden furniture and features
- KU7.** various material of appropriate size and weight for rooftop gardens
- KU8.** varieties of trees, plants, and shrubs suitable for a rooftop garden and their maintenance
- KU9.** the process of preparing lightweight potting soil for use in rooftop garden plant pots
- KU10.** the process of installing windbreaks and other appropriate support to provide shading for the plants, trees and shrubs

Generic Skills (GS)

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

- GS1.** prepare work-plan and related notes
- GS2.** read relevant literature to learn about advancements in the field of work
- GS3.** co-ordinate with co-workers and clients to achieve work objectives

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- GS4.** identify possible disruptions to work and take preventive measures
- GS5.** perform basic calculations
- GS6.** plan and schedule tasks for effective time-management
- GS7.** communicate politely and professionally
- GS8.** evaluate all possible solutions to a problem to select the best one

Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Plan the rooftop garden</i>	10	12	-	8
PC1. check if a rooftop garden is permitted as per the local legislation in the proposed area	-	-	-	-
PC2. assess the roof's loading capacity with the help of a structural engineer/ architect	-	-	-	-
PC3. ensure that there are no major installations or structures on the roof that may cause obstruction	-	-	-	-
PC4. assess the climatic conditions at the site to establish suitability for planting a rooftop garden	-	-	-	-
PC5. obtain the necessary approvals for the rooftop garden design	-	-	-	-
PC6. check that the building has an effective drainage system	-	-	-	-
PC7. assess the sunlight and wind exposure at the roof	-	-	-	-
PC8. check for adequate availability of water at the roof	-	-	-	-
PC9. measure the available space for the purpose of designing the rooftop garden	-	-	-	-
PC10. plan the placement of plants, furniture and garden features	-	-	-	-
PC11. select heat and drought tolerant plants, trees and shrubs of appropriate weight and size for the rooftop garden	-	-	-	-
PC12. select the appropriate material such as plastic, fiberglass or foam planting containers according to the roof's loading capacity	-	-	-	-
PC13. prepare a detailed plan through discussion with the client	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC14. estimate the cost of setting up the rooftop garden	-	-	-	-
<i>Set up the rooftop garden</i>	12	12	-	12
PC15. arrange the necessary plants/ shrubs, material, tools and equipment for setting up the rooftop garden	-	-	-	-
PC16. prepare lightweight potting soil for planting plants, trees and shrubs	-	-	-	-
PC17. plant the trees, plants and shrubs as per the SOP	-	-	-	-
PC18. water the plants and shrubs with the recommended quantity of water	-	-	-	-
PC19. install windbreaks, appropriate support and shading for the plants, trees and shrubs	-	-	-	-
PC20. apply fertilizers in the recommended quantity	-	-	-	-
PC21. install an irrigation system for watering the plants	-	-	-	-
PC22. carry out waterproofing of the roof garden	-	-	-	-
PC23. arrange for safe drainage of water from the garden	-	-	-	-
PC24. install garden features and furniture of appropriate weight and size as per the garden plan	-	-	-	-
<i>Maintain the rooftop garden</i>	8	16	-	10
PC25. apply mulch on the plants to stabilise evaporation and control weed	-	-	-	-
PC26. examine plants, trees and shrubs for healthy growth and pest and disease infestation	-	-	-	-
PC27. apply fertilizers, manure and pesticides/ insecticides in the recommended quantity at appropriate intervals	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC28. train plants and shrubs as per the requirement	-	-	-	-
PC29. prune plants, trees and shrubs to ensure their healthy growth and aesthetics	-	-	-	-
PC30. remove weeds as per the SOP	-	-	-	-
PC31. carry out repair and maintenance of the garden pots, features, irrigation and drainage system	-	-	-	-
PC32. maintain record of the maintenance activities	-	-	-	-
NOS Total	30	40	-	30

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	AGR/N0855
NOS Name	Setup and maintain a rooftop garden
Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Landscaping, Gardening and Urban Farming
NSQF Level	2
Credits	1
Version	1.0
Last Reviewed Date	29/09/2023
Next Review Date	29/09/2026
NSQC Clearance Date	29/09/2023

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

Qualification Pack

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

Qualification Pack

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	18/02/2025
Next Review Date	18/02/2030
NSQC Clearance Date	18/02/2025

Assessment Guidelines and Assessment Weightage

Assessment Guidelines

- 1.Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each 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.
- 6.In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack

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/N0852.Prepare saplings for transplanting in the garden	30	40	-	30	100	30
AGR/N0853.Set the garden as per the plan	30	40	-	30	100	20
AGR/N0854.Undertake maintenance of the garden	30	40	-	30	100	30
AGR/N0855.Setup and maintain a rooftop garden	30	40	-	30	100	15
DGT/VSQ/N0101.Employability Skills (30 Hours)	20	30	-	-	50	5
Total	140	190	-	120	450	100

Qualification Pack

Acronyms

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

Qualification Pack

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.

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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.