

Qualification Pack



Plant Health Assistant

QP Code: AGR/Q6111

Version: 1.0

NSQF Level: 2

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AGR/Q6111: Plant Health Assistant

Brief Job Description

A Plant Health Assistant is responsible for planting, maintaining, and removing trees, woody plants and shrubs. The individual is required to prune trees, woody plants and shrubs and remove diseased or potentially dangerous ones. This involves climbing trees and manoeuvring in and around them. The person also maintains the health of trees, woody plants and shrubs, which involves pest and disease management and the application of fertilizers, soil health management and irrigation. The individual also uses and maintains various hand and power tools for carrying out relevant tasks.

Personal Attributes

The individual must be physically fit to work for long durations at heights. The person must be able to work in coordination with others. The individual must have reading, writing, verbal communication skills, and problem-solving skills.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. [AGR/N6143: Carry out planting of trees, woody plants and shrubs](#)
2. [AGR/N6144: Carry out pest, disease and nutrient management of trees, woody plants and shrubs](#)
3. [AGR/N6145: Carry out general maintenance of trees](#)
4. [DGT/VSQ/N0101: Employability Skills \(30 Hours\)](#)

Qualification Pack (QP) Parameters

Sector	Agriculture
Sub-Sector	Forestry, Environment and Renewable Energy Management
Occupation	Agro-Forestry Management
Country	India
NSQF Level	2
Credits	7

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Aligned to NCO/ISCO/ISIC Code	NCO-2015/6112.9900
Minimum Educational Qualification & Experience	No formal education prescribed with NA of experience
Minimum Level of Education for Training in School	
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
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NQR Version	1.0

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AGR/N6143: Carry out planting of trees, woody plants and shrubs

Description

This OS unit is about planning and planting trees, woody plants and shrubs. It includes site and species selection, preparing the layout, and carrying out planting and other activities.

Scope

The scope covers the following :

- Select the site and tree/woody plant/shrub species
- Prepare the layout and arrange the resources
- Prepare the site for planting
- Plant trees, woody plants and shrubs
- Set up stakes, support and windbreaks

Elements and Performance Criteria

Select the site and tree/woody plant/shrub species

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

- PC1.** determine the soil and space requirements for planting new trees, plants and shrubs
- PC2.** select the appropriate tree, plant and shrub species that can grow in the selected climate zone and the soil conditions at the site
- PC3.** select the appropriate site to plant the selected tree, plant and shrub species

Prepare the layout and arrange the resources

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

- PC4.** prepare a layout planning the placement of varieties of trees, plants and shrubs to ensure aesthetics and no obstructions and disruptions to utilities
- PC5.** identify appropriate spots at the recommended planting density for planting trees, plants and shrubs to ensure their optimum growth
- PC6.** arrange the selected species of trees, plants and shrubs in the required number for planting, ensuring they are free from pests and diseases
- PC7.** store the procured trees, plants and shrubs at the recommended temperature and humidity, ensuring hygienic conditions in the storage area

Prepare the site for planting

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

- PC8.** prepare the identified spots for planting by removing any debris and digging holes of the recommended dimensions
- PC9.** apply the recommended organic and inorganic fertilizers in the holes before planting
- PC10.** arrange for efficient drainage of water to prevent waterlogging at the planting spots

Plant trees, woody plants and shrubs

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

- PC11.** prepare seed balls for the relevant seed varieties to aid their handling and germination

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- PC12.** propagate tree seedlings/ saplings following the appropriate propagation methods
- PC13.** plant the selected trees, woody plants and shrubs appropriately, maintaining the planned planting density
- PC14.** transplant the tree seedlings/ saplings taking the appropriate precautions to ensure their survival
- PC15.** follow the recommended safety measures while planting advanced-sized trees
- PC16.** assist in establishing tree plantations
- PC17.** follow the appropriate measures to facilitate smooth planting and establishment of trees
- PC18.** apply the recommended organic or inorganic fertilizers to the trees, plants and shrubs immediately after planting and water them with the recommended quantity
- PC19.** arrange to protect the planted trees, plants and shrubs from extreme heat/ cold and astray animals

Set up stakes, support and windbreaks

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

- PC20.** install stakes to train the growth of trees, plants and shrubs, as required
- PC21.** set up appropriate support/aids to train plants into decorative shapes
- PC22.** plant appropriate types of trees as windbreaks to protect young and tender plants from strong winds
- PC23.** create pergolas around plants for improved support
- PC24.** install decorative tree guards
- PC25.** set up lacy ironwork trellis or wooden lattice for climbers
- PC26.** install appropriate support to provide support to heavy and large trees

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the scope and nature of arboriculture or vriksh sanrakshan
- KU2.** the basics of horticulture
- KU3.** different types of plant and tree species, e.g. deciduous trees (maple, birch betula, ash, oak, etc.)
- KU4.** the biology of trees, i.e. photosynthesis, respiration, transpiration, vernalization, etc.
- KU5.** the identification of different types of plants and trees
- KU6.** different types of soils suitable for a variety of trees
- KU7.** the structures of different types of soils
- KU8.** the soil-tree relationship
- KU9.** the process of designing tree plantations
- KU10.** how to produce drawings to scale
- KU11.** the importance and process of assessing the soil and space requirements for planting new trees, woody plants and shrubs
- KU12.** the process of identifying the appropriate spots at the recommended planting density for planting trees, woody plants and shrubs to ensure their optimum growth

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- KU13.** different species of trees, woody plants and shrubs suitable for growing in different climate zones and soil conditions
- KU14.** the criteria to identify the appropriate tree species to be grown in different agro-climatic zones
- KU15.** the criteria for establishing a tree plantation at a specific site, considering the site restrictions, costs, functions, etc.
- KU16.** the process of designing tree plantations, considering the factors such as the soil profile, climate suitability for selected tree species, the influence of trees on buildings and utilities, etc.
- KU17.** the importance of growing pest, disease and harsh weather tolerant plant and tree species
- KU18.** the process of preparing a layout planning the placement of varieties of trees, woody plants and shrubs
- KU19.** the importance of checking trees, plants and shrubs while procuring them to ensure they are free from pests and diseases
- KU20.** the recommended temperature and humidity for storing the procured trees, woody plants and shrubs
- KU21.** different seed propagation techniques
- KU22.** how to propagate the appropriate tree varieties in a nursery and how to maintain the nursery stock
- KU23.** the process of removing debris and digging holes of the recommended dimensions for planting
- KU24.** the relevant plant establishment programs
- KU25.** the environments hostile to tree growth
- KU26.** the appropriate care to be provided after planting to help plants and trees establish
- KU27.** the process of planting advanced-sized trees and bare-rooted plants
- KU28.** the process of transplanting trees and the use of tree guards
- KU29.** pocket planting, slope serration and wattling
- KU30.** the process of acclimatizing different types of plants and trees
- KU31.** the benefits of planting fire, acid, saline and frost-resistant trees
- KU32.** the importance of planting hardy trees in city areas
- KU33.** the influence of trees on buildings and the appropriate considerations
- KU34.** the recommended organic and inorganic fertilizers to be applied to the soil before and after planting of trees, woody plants and shrubs
- KU35.** the importance of ensuring efficient drainage of water to prevent waterlogging at the planting spots
- KU36.** the process of planting trees, woody plants and shrubs, and the recommended planting density to be maintained
- KU37.** the importance and process of installing appropriate support such as stakes to train the growth of trees, woody plants and shrubs as desired
- KU38.** the immediate care to be provided to trees, woody plants and shrubs after planting
- KU39.** how to protect the planted trees, plants and shrubs from strong winds, extreme heat/ cold and astray animals

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- KU40.** different parts of a tree, e.g. tissue, leaf, wood, root structures, and how they interact with each other
- KU41.** main characteristics of the most common tree genera and the terminology needed for identifications
- KU42.** the key consideration for choosing the right tree for the site to maximize its benefits
- KU43.** the plant nomenclature and their classifications
- KU44.** how plant characteristics are used in tree identification
- KU45.** how to create relevant drawings to scale
- KU46.** essential tree nutrition required for their optimum growth
- KU47.** general horticulture practices, such as seedbed/nursery bed preparation, sowing/planting varieties of seeds/plants, fertilizer and pesticide application, weeding, training, pruning, etc.
- KU48.** the basics of garden management, parks management, landscaping, land rehabilitation, tree surgery, forestry, tree nursery production, and urban horticulture
- KU49.** different approaches to land rehabilitation
- KU50.** different types of soil appropriate for growing trees
- KU51.** how to determine the need to install support for trees and plants
- KU52.** the importance of installing windbreaks, different types of windbreak designs
- KU53.** how to support a heavy crop of flowers or fruit
- KU54.** how to support non-clinging climbers
- KU55.** how to train plants into decorative shapes and around doorways and windows
- KU56.** the appropriate measures to be taken to protect vulnerable plants from wind damage
- KU57.** how to select the windbreak tree species to be grown
- KU58.** the appropriate sun protection measures
- KU59.** the appropriate fencing for tree plantations

Generic Skills (GS)

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

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

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Select the site and tree/woody plant/shrub species</i>	4	6	-	4
PC1. determine the soil and space requirements for planting new trees, plants and shrubs	-	-	-	-
PC2. select the appropriate tree, plant and shrub species that can grow in the selected climate zone and the soil conditions at the site	-	-	-	-
PC3. select the appropriate site to plant the selected tree, plant and shrub species	-	-	-	-
<i>Prepare the layout and arrange the resources</i>	6	8	-	6
PC4. prepare a layout planning the placement of varieties of trees, plants and shrubs to ensure aesthetics and no obstructions and disruptions to utilities	-	-	-	-
PC5. identify appropriate spots at the recommended planting density for planting trees, plants and shrubs to ensure their optimum growth	-	-	-	-
PC6. arrange the selected species of trees, plants and shrubs in the required number for planting, ensuring they are free from pests and diseases	-	-	-	-
PC7. store the procured trees, plants and shrubs at the recommended temperature and humidity, ensuring hygienic conditions in the storage area	-	-	-	-
<i>Prepare the site for planting</i>	4	6	-	4
PC8. prepare the identified spots for planting by removing any debris and digging holes of the recommended dimensions	-	-	-	-
PC9. apply the recommended organic and inorganic fertilizers in the holes before planting	-	-	-	-
PC10. arrange for efficient drainage of water to prevent waterlogging at the planting spots	-	-	-	-
<i>Plant trees, woody plants and shrubs</i>	6	8	-	6

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. prepare seed balls for the relevant seed varieties to aid their handling and germination	-	-	-	-
PC12. propagate tree seedlings/ saplings following the appropriate propagation methods	-	-	-	-
PC13. plant the selected trees, woody plants and shrubs appropriately, maintaining the planned planting density	-	-	-	-
PC14. transplant the tree seedlings/ saplings taking the appropriate precautions to ensure their survival	-	-	-	-
PC15. follow the recommended safety measures while planting advanced-sized trees	-	-	-	-
PC16. assist in establishing tree plantations	-	-	-	-
PC17. follow the appropriate measures to facilitate smooth planting and establishment of trees	-	-	-	-
PC18. apply the recommended organic or inorganic fertilizers to the trees, plants and shrubs immediately after planting and water them with the recommended quantity	-	-	-	-
PC19. arrange to protect the planted trees, plants and shrubs from extreme heat/ cold and stray animals	-	-	-	-
<i>Set up stakes, support and windbreaks</i>	10	12	-	10
PC20. install stakes to train the growth of trees, plants and shrubs, as required	-	-	-	-
PC21. set up appropriate support/aids to train plants into decorative shapes	-	-	-	-
PC22. plant appropriate types of trees as windbreaks to protect young and tender plants from strong winds	-	-	-	-
PC23. create pergolas around plants for improved support	-	-	-	-
PC24. install decorative tree guards	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC25. set up lacy ironwork trellis or wooden lattice for climbers	-	-	-	-
PC26. install appropriate support to provide support to heavy and large trees	-	-	-	-
NOS Total	30	40	-	30

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National Occupational Standards (NOS) Parameters

NOS Code	AGR/N6143
NOS Name	Carry out planting of trees, woody plants and shrubs
Sector	Agriculture
Sub-Sector	Forestry, Environment and Renewable Energy Management
Occupation	Agro-Forestry Management
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/N6144: Carry out pest, disease and nutrient management of trees, woody plants and shrubs

Description

This OS unit is about maintaining trees, woody plants, shrubs and their surroundings.

Scope

The scope covers the following :

- Perform pest and disease management
- Perform soil, nutrient and irrigation management

Elements and Performance Criteria

Perform pest and disease management

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

- PC1.** follow the recommended preventive and control measures and plant pests, and diseases and disorders
- PC2.** conduct a pre-work inspection to identify biotic hazards, such as bees and poisonous plants and take appropriate preventive measures
- PC3.** check the trees, plants and shrubs regularly to identify pest, insect and disease infestation
- PC4.** diagnose different types of tree diseases and disorders by studying the symptoms
- PC5.** identify the signs of heat stress and frost damage in trees and take appropriate remedial measures
- PC6.** identify and adopt the latest and innovative plant protection technologies
- PC7.** identify bark wounds and carry out appropriate treatment
- PC8.** identify and remove termite infestation from trees
- PC9.** apply the recommended pesticides and insecticides to trees, plants and shrubs as per the prescription, using the relevant tools, equipment and Personal Protective Equipment (PPE)
- PC10.** follow the recommended practices to prevent adverse effects of pesticides in the surroundings
- PC11.** maintain the manual and/or electronic record concerning the use of pesticides in the physical registers and the relevant computer application

Perform soil, nutrient and irrigation management

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

- PC12.** check the pH levels in the soil using a pH meter and apply the recommended treatment in the prescribed quantity to adjust the pH level, if required
- PC13.** identify the signs of nutrient deficiency in plants and trees
- PC14.** coordinate with an approved lab for the testing of soil
- PC15.** apply the suggested organic and inorganic fertilizers to the soil in the recommended quantity at appropriate intervals to maintain the required macro and micronutrient levels and ensure the healthy growth of trees, plants and shrubs

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- PC16.** irrigate the trees, plants, and shrubs with the recommended quantity of water as per the irrigation schedule recommended for planted species

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the basics of tree and plant anatomy and taxonomy, plant pathology, and soil science
- KU2.** the applicable arboriculture, horticulture, and landscaping practices and methods
- KU3.** the importance and process of examining trees, plants and shrubs regularly to identify pest, insect and disease infestation
- KU4.** different classifications of insects and the relevant control measures
- KU5.** the control measures for the relevant non-insect pests
- KU6.** the importance of conducting regular tree and soil inspections, and observing trees growing in a wide variety of conditions for relevant problems
- KU7.** different types of health problems experienced by trees and appropriate treatments for them
- KU8.** the symptoms of infestation by different types of pests, insects and diseases that affect trees, woody plants and shrubs, such as blight and fungal infection
- KU9.** the process of diagnosing tree problems
- KU10.** the appropriate treatment for heat stress, frost damage and bark wounds
- KU11.** the ecology of soils and plant health
- KU12.** the process of determining the damage caused to trees by pests and insects and whether they can be saved through treatment or need to be felled
- KU13.** the process of applying the recommended pesticides and insecticides to trees, plants and shrubs as per the prescription
- KU14.** the benefits and potential risks of using different types of pesticides
- KU15.** the use of the relevant tools, equipment and Personal Protective Equipment (PPE) for applying pesticides
- KU16.** the recommended practices to be followed to prevent adverse effects of pesticides in the surroundings of trees, plants and shrubs
- KU17.** the appropriate treatment to be used to treat the soil around diseased trees, woody plants and shrubs
- KU18.** how to deal with chemical poisoning
- KU19.** the process of maintaining manual and electronic records using the physical registers and the relevant computer application
- KU20.** the recommended level of moisture to be maintained in the soil for the healthy growth of trees, woody plants and shrubs
- KU21.** how to balance soil composition and maintain correct moisture levels through watering and training
- KU22.** the trees and the water table (aquifers)
- KU23.** the importance of ensuring efficient drainage around trees, plants and shrubs to prevent damages caused by waterlogging
- KU24.** the process of checking the pH levels in the soil using a pH meter and applying the recommended treatment to adjust the pH level

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- KU25.** the importance of monitoring and maintaining the appropriate soil conditions for the healthy growth of trees, plants and shrubs
- KU26.** the process of getting the soil tested by an approved soil testing lab and applying the prescribed treatment to maintain the required macro and micronutrient levels
- KU27.** the appropriate organic and inorganic fertilizers to be applied to a variety of soils for the healthy growth of trees, plants and shrubs
- KU28.** the recommended irrigation schedule for different species of trees, woody plants, and shrubs
- KU29.** the importance of applying the recommended organic and inorganic fertilizers to the soil in the recommended quantity for the healthy growth of trees, plants and shrubs
- KU30.** the main characteristics of common tree genera and the terminology needed for their identification
- KU31.** various biotic and abiotic disorders relevant to arboriculture
- KU32.** how to diagnose different types of disorders in trees and the appropriate treatment to be given for them
- KU33.** basic tree nutrition requirements
- KU34.** the appropriate fertilizers for trees and different fertilizer application methods
- KU35.** the need and process of pruning trees
- KU36.** the requirement of training different types of trees and plants and the use of different types of training materials
- KU37.** the symptoms of different types of pest and disease infestation in plants and trees and the appropriate organic and inorganic control measures
- KU38.** the biological control measures for tree pests and diseases
- KU39.** use of various equipment for tree maintenance
- KU40.** tree injection technique and its applications
- KU41.** the process of analyzing different specimens of mature trees from each different genera to detect any patterns in problems occurring in those trees
- KU42.** the appropriate stage of tree growth for the application of fertilizers
- KU43.** the advantages and disadvantages of various fertilizer application methods
- KU44.** the potential damage lightning may cause to trees and the techniques for installing appropriate protection
- KU45.** the appropriate measures to be taken to foster tree stability and health in the urban landscape
- KU46.** the appropriate planting techniques crucial for tree survival, establishment, and longevity
- KU47.** the appropriate practices to be followed to optimize the health and structure of trees in various situations
- KU48.** the arboriculture pest management techniques
- KU49.** the arboriculture plant health and pest control practices
- KU50.** how trees create, store, and manage their resources
- KU51.** how urban soils can limit root growth and development, and how soils can be improved to foster tree growth
- KU52.** how soil structure and the environment affect water availability for trees
- KU53.** the strategies to be adopted to protect trees during construction
- KU54.** the basic principles of tree risk assessment

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Generic Skills (GS)

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

- GS1.** maintain work-related notes and records
- GS2.** communicate politely and professionally
- GS3.** read the relevant literature to learn about the latest developments in the field of work
- GS4.** perform work-related calculations
- GS5.** listen attentively to understand the information/ instructions being shared
- GS6.** plan and prioritize tasks to ensure timely completion
- GS7.** coordinate with the co-workers to achieve the work objectives
- GS8.** evaluate all possible solutions to a problem to select the best one
- GS9.** identify possible disruptions to work and take appropriate preventive measures
- GS10.** take quick decisions to deal with workplace emergencies/ accidents

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Perform pest and disease management</i>	15	20	-	15
PC1. follow the recommended preventive and control measures and plant pests, and diseases and disorders	-	-	-	-
PC2. conduct a pre-work inspection to identify biotic hazards, such as bees and poisonous plants and take appropriate preventive measures	-	-	-	-
PC3. check the trees, plants and shrubs regularly to identify pest, insect and disease infestation	-	-	-	-
PC4. diagnose different types of tree diseases and disorders by studying the symptoms	-	-	-	-
PC5. identify the signs of heat stress and frost damage in trees and take appropriate remedial measures	-	-	-	-
PC6. identify and adopt the latest and innovative plant protection technologies	-	-	-	-
PC7. identify bark wounds and carry out appropriate treatment	-	-	-	-
PC8. identify and remove termite infestation from trees	-	-	-	-
PC9. apply the recommended pesticides and insecticides to trees, plants and shrubs as per the prescription, using the relevant tools, equipment and Personal Protective Equipment (PPE)	-	-	-	-
PC10. follow the recommended practices to prevent adverse effects of pesticides in the surroundings	-	-	-	-
PC11. maintain the manual and/or electronic record concerning the use of pesticides in the physical registers and the relevant computer application	-	-	-	-
<i>Perform soil, nutrient and irrigation management</i>	15	20	-	15

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. check the pH levels in the soil using a pH meter and apply the recommended treatment in the prescribed quantity to adjust the pH level, if required	-	-	-	-
PC13. identify the signs of nutrient deficiency in plants and trees	-	-	-	-
PC14. coordinate with an approved lab for the testing of soil	-	-	-	-
PC15. apply the suggested organic and inorganic fertilizers to the soil in the recommended quantity at appropriate intervals to maintain the required macro and micronutrient levels and ensure the healthy growth of trees, plants and shrubs	-	-	-	-
PC16. irrigate the trees, plants, and shrubs with the recommended quantity of water as per the irrigation schedule recommended for planted species	-	-	-	-
NOS Total	30	40	-	30

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National Occupational Standards (NOS) Parameters

NOS Code	AGR/N6144
NOS Name	Carry out pest, disease and nutrient management of trees, woody plants and shrubs
Sector	Agriculture
Sub-Sector	Forestry, Environment and Renewable Energy Management
Occupation	Agro-Forestry Management
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/N6145: Carry out general maintenance of trees

Description

This OS unit is about carrying out general maintenance of trees, including cleaning, treating physical damage and moving them.

Scope

The scope covers the following :

- Perform tree cleaning
- Treat the physical damage on trees
- Treat tree poisoning and remove nails and tree guards
- Move trees and create and place nests on trees

Elements and Performance Criteria

Perform tree cleaning

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

PC1. identify and remove mosses from trees

PC2. perform cleaning of trees using water and the appropriate cleaning solutions

Treat the physical damage on trees

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

PC3. assess the physical damage on trees, such as engravings and treat them appropriately

PC4. determine the need for plastering tree branches and plaster them using the recommended treatment and aids

PC5. apply the recommended treatment to heal the tree parts with their bark removed

PC6. identify cracks on trees and apply the recommended treatment to treat them

Treat tree poisoning and remove nails and tree guards

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

PC7. identify the symptoms of poisoning in trees

PC8. treat tree poisoning, taking the appropriate tree protection measures

PC9. identify the need to remove tree nails and remove the nails using the appropriate tools and equipment, ensuring minimum damage to trees

PC10. identify the need to remove tree guards and remove them, protecting trees from damage

PC11. remove the outgrowth of sacred fig (peepal) tree from residential areas and re-transplant it in the appropriate places

PC12. provide the appropriate day-care for trees

Move trees and create and place nests on trees

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

PC13. assist in moving trees, ensuring to protect them during the process

PC14. create nests and place them appropriately on trees

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Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the process of performing the cleaning of trees and the appropriate cleaning solutions to be used
- KU2.** how to assess physical damage on trees and treat them
- KU3.** the process of plastering tree branches and using the recommended treatment and aids
- KU4.** the recommended treatment to be applied to heal the tree parts with their bark removed
- KU5.** how to treat the cracks on trees
- KU6.** the symptoms of poisoning in trees and the appropriate treatment for treating it
- KU7.** how to remove the nails from trees using the appropriate tools and equipment
- KU8.** the process of removing and re-transplanting the outgrowth of sacred fig (peepal) tree
- KU9.** the process of moving trees and the appropriate precautions to be taken
- KU10.** how to create and place nests on trees

Generic Skills (GS)

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

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

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Perform tree cleaning</i>	5	6	-	5
PC1. identify and remove mosses from trees	-	-	-	-
PC2. perform cleaning of trees using water and the appropriate cleaning solutions	-	-	-	-
<i>Treat the physical damage on trees</i>	9	12	-	9
PC3. assess the physical damage on trees, such as engravings and treat them appropriately	-	-	-	-
PC4. determine the need for plastering tree branches and plaster them using the recommended treatment and aids	-	-	-	-
PC5. apply the recommended treatment to heal the tree parts with their bark removed	-	-	-	-
PC6. identify cracks on trees and apply the recommended treatment to treat them	-	-	-	-
<i>Treat tree poisoning and remove nails and tree guards</i>	11	16	-	11
PC7. identify the symptoms of poisoning in trees	-	-	-	-
PC8. treat tree poisoning, taking the appropriate tree protection measures	-	-	-	-
PC9. identify the need to remove tree nails and remove the nails using the appropriate tools and equipment, ensuring minimum damage to trees	-	-	-	-
PC10. identify the need to remove tree guards and remove them, protecting trees from damage	-	-	-	-
PC11. remove the outgrowth of sacred fig (peepal) tree from residential areas and re-transplant it in the appropriate places	-	-	-	-
PC12. provide the appropriate day-care for trees	-	-	-	-
<i>Move trees and create and place nests on trees</i>	5	6	-	5

Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC13. assist in moving trees, ensuring to protect them during the process	-	-	-	-
PC14. create nests and place them appropriately on trees	-	-	-	-
NOS Total	30	40	-	30

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	AGR/N6145
NOS Name	Carry out general maintenance of trees
Sector	Agriculture
Sub-Sector	Forestry, Environment and Renewable Energy Management
Occupation	Agro-Forestry Management
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

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	18/02/2028
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 the proportion of marks for Theory and Skills Practical for each PC.
2. The assessment for the theory part will be based on the knowledge bank of questions created by the SSC.
3. Individual assessment agencies will create unique question papers for the theory part for each candidate at each examination/training centre (as per assessment criteria below).
4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training centre based on these criteria.
5. In case of successfully passing only a certain number of NOSs, the trainee is eligible to take a 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/N6143.Carry out planting of trees, woody plants and shrubs	30	40	-	30	100	30
AGR/N6144.Carry out pest, disease and nutrient management of trees, woody plants and shrubs	30	40	-	30	100	35
AGR/N6145.Carry out general maintenance of trees	30	40	-	30	100	30
DGT/VSQ/N0101.Employability Skills (30 Hours)	20	30	-	-	50	5
Total	110	150	-	90	350	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.