

QUALIFICATIONS PACK - OCCUPATIONAL STANDARDS FOR AGRICULTURE AND ALLIED INDUSTRY

What are Occupational Standards(OS)?

- OS describe what individuals need to do, know and understand in order to carry out a particular job role or function
- OS are performance standards that individuals must achieve when carrying out functions in the workplace, together with specifications of the underpinning knowledge and understanding



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Introduction

Qualifications Pack- Gardener

SECTOR: AGRICULTURE AND ALLIED

SUB-SECTOR: Agriculture Crop Production

OCCUPATION: Landscaping, Gardening and Urban Farming

REFERENCE ID: AGR/Q0801

ALIGNED TO: NCO-2015/6113.0301

Gardener in the agriculture industry is a very important job role related to landscaping and gardening activity, in hindi it is commonly known as 'Mali'.

Brief Job Description: A Gardener is responsible for taking care of beautification of lawns and gardens for private houses, Parks, and Hotels in order to attract customers.

Personal Attributes: This job requires the individual to work independently and be comfortable in making decisions pertaining to his/her area of work. The individual should be result oriented and have decision making skills for instant problem solving.

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Job Details	Qualifications Pack Code	AGR/Q0801		
	Job Role	Gardener		
	Credits(NSQF)	TBD	Version number	1.0
	Sector	Agriculture And Allied	Drafted on	25/02/14
	Sub-sector	Agriculture Crop Production	Last reviewed on	14/06/17
	Occupation	Landscaping Gardening& Urban Farming	Next review date	14/06/21
	NSQC Clearance on	18/06/2015		

Job Role	Gardener (‘Mali’ in Hindi)
Role Description	A Gardener is responsible for tending lawns, trees, shrubs, ground covers. He needs to be aware of the soil and nutrition requirements of plants, pests and diseases & their control and drainage. Gardeners also need to acquire skills in grafting, pruning, weeding and harvesting of flowers, fruits and vegetables. Needs to know use of basic tools and hand powered machinery such as pruners, brush cutters, lawn mowers etc
NSQF level	4
Minimum Educational Qualifications	5 th Standard pass, preferably
Maximum Educational Qualifications	Not Applicable
Training (Suggested but not mandatory)	Basic knowledge of garden and experience in gardening for one year
Minimum Job Entry Age	17 Years
Experience	6 months to 1 year of experience of working in garden or nursery
Applicable National Occupational Standards (NOS)	Compulsory: <ol style="list-style-type: none"> 1. AGR / N0801- Nursery Management and Propagation of Plant Material 2. AGR / N0802- Designing of Garden Components 3. AGR / N0803-Plantation, Maintenance and Care of Garden 4. AGR/N9903- Maintain health & Safety at the work place
Performance Criteria	As described in the relevant OS units

Definitions

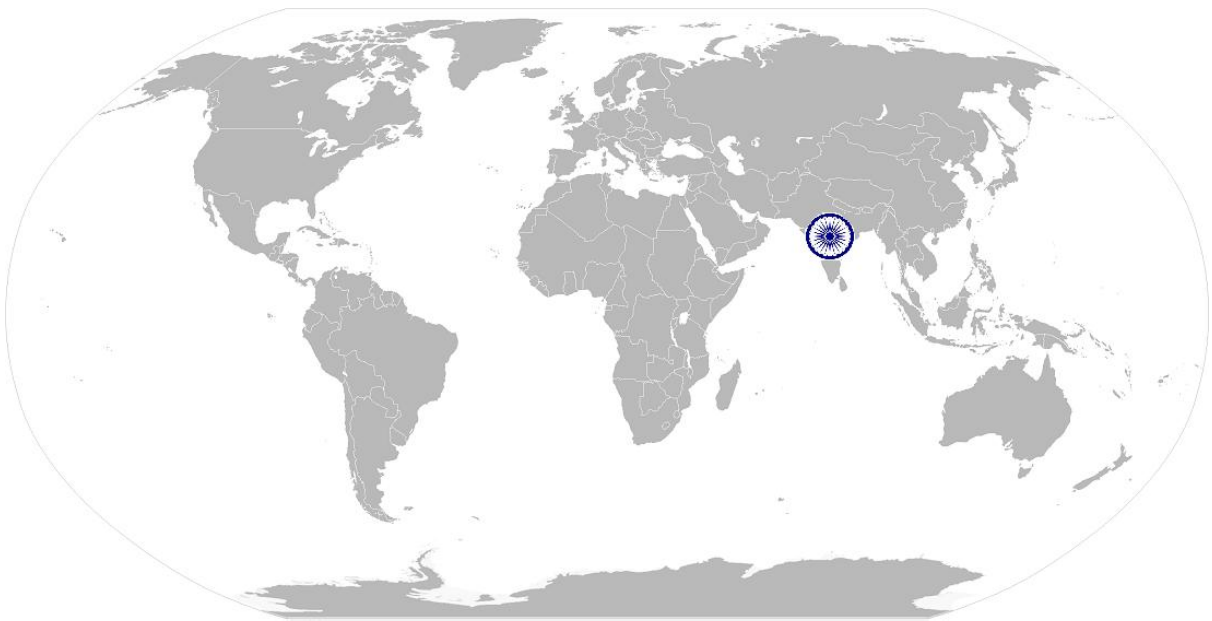
Keywords /Terms	Description
Sector	Sector is a conglomeration of different business operations having similar businesses and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components
Occupation	Occupation is a set of job roles, which perform similar/related set of functions in an industry.
Function	Function is an activity necessary for achieving the key purpose of the sector, occupation, or area of work, which can be carried out by a person or a group of persons. Functions are identified through functional analysis and form the basis of OS.
Job Role	Job role defines a unique set of functions that together form a unique employment opportunity in an organization.
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 they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria	Performance Criteria are statements that together specify the standard of performance required when carrying out a task.
NOS	NOS are Occupational Standards which apply uniquely in the Indian context.
Qualifications Pack Code	Qualifications Pack Code is a unique reference code that identifies a qualifications pack.
Qualifications Pack	Qualifications Pack comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A Qualifications Pack is assigned a unique qualification 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.
Knowledge and Understanding	Knowledge and Understanding are statements which together specify the technical, generic, professional and organizational specific knowledge that an individual needs in order to perform to the required standard.
Organizational Context	Organizational Context includes the way the organization 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 or Generic Skills	Core Skills or Generic Skills are a group of skills that are key to learning and working 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.

Vertical	Vertical may exist within a sub-sector representing different domain areas or the client industries served by the industry
Keywords /Terms	Description
OS	Occupation Standard
NOS	National Occupation Standard
NSQF	National Skills Qualification Framework
Agr	Agriculture

AGR/N0801

Nursery Management and Propagation of Plant Material

National Occupational Standard



Overview

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

AGR/N0801
Nursery Management and Propagation of Plant Material

National Occupational Standard

Unit Code	AGR/N0801
Unit Title (Task)	Nursery Management and Propagation of Planting material
Description	This unit deals with management of nursery and propagation of planting materials using different methods.
Scope	This unit/task covers the following: <ul style="list-style-type: none"> Nursery management Propagation techniques Some other operations
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
Nursery Management	To be competent, the individual on the job must be able to: <ul style="list-style-type: none"> PC1. establish physical infrastructure – shade house, mist chamber, irrigation system PC2. prepare soil mixtures PC3. prepare seed beds PC4. transplant seedlings PC5. take up potting of seedlings PC6. take up hardening of seedlings
Propagation Techniques	<ul style="list-style-type: none"> PC7. propagate plants through cuttings PC8. practice layering and stooling (Guava) PC9. practice grafting (Mango) PC10. practice budding in rose / citrus PC11. raise root stocks for grafting and budding
Some other Operations	<ul style="list-style-type: none"> PC12. use plastics for nursery operations PC13. identify and grow indoor plants of their basic requirements PC14. layout nursery area PC15. identify and use proper root stock and scion for propagation
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	The user/individual on the job needs to know and understand: <ul style="list-style-type: none"> KA1. relevant legislation, standards, policies, and procedures in work KA2. relevant health and safety requirements applicable in the work environment KA3. own job role and responsibilities and sources for information pertaining to work KA4. who to approach for support in order to obtain work related information, clarifications and support KA5. importance of following health, hygiene, safety and quality standards and the impact of not following the standards on consumers and the business KA6. documentation and related procedures applicable in the context of work
B. Technical Knowledge	The individual on the job needs to know and understand: <ul style="list-style-type: none"> KB1. effective working relationships and how to work effectively with others in the garden

AGR/N0801
Nursery Management and Propagation of Plant Material

	KB2. basic botany KB3. water, media & nutrition KB4. growth & propagation techniques KB5. planting & potting techniques KB6. fertilizing KB7. pest & disease management KB8. irrigation KB9. methods / procedures for resource (water & chemicals) conservation KB10. safety methods in pesticides use & disposal KB11. use garden tools and implements KB12. maintaining cleanliness in nursery by sweeping trashes and pulling out dead plant parts etc.
Skills (S)	
A. Core Skills/ Generic Skills	Writing Skills
	The individual on the job needs to know and understand how to: SA1. mention the data which are required for record keeping purpose SA2. write report depicting problems to the appropriate personnel in a timely manner SA3. write descriptions and details about incidents in reports
	Reading Skills
	The individual on the job needs to know and understand how to: SA1. read instruction manuals for hand tool and equipments SA2. read instructions on work orders and nursery drawings SA3. read directions on pesticide and fertilizer labels for details of handling, mixing, and application and first aid procedures
	Oral Communication (Listening and Speaking skills)
	The individual on the job needs to know and understand how to: SA1. receive instructions and seek advice from supervisors and managers SA2. lead staff meetings and worksite safety meetings SA3. speak with suppliers and contractors to inquire about availabilities of materials and supplies
B. Professional Skills	Decision Making
	The individual on the job needs to know and understand how to: SB1. choose work procedures, installation and planting techniques and equipment SB2. select appropriate hand tools and personal protection devices considering safety requirements, materials being used SB3. follow basic arithmetic and algebraic principles
	Plan and Organize
	The individual on the job needs to know and understand how to: SB4. develop approaches for implementing an idea SB5. plan and prioritize work to be done
	Customer Centricity

AGR/N0801
Nursery Management and Propagation of Plant Material

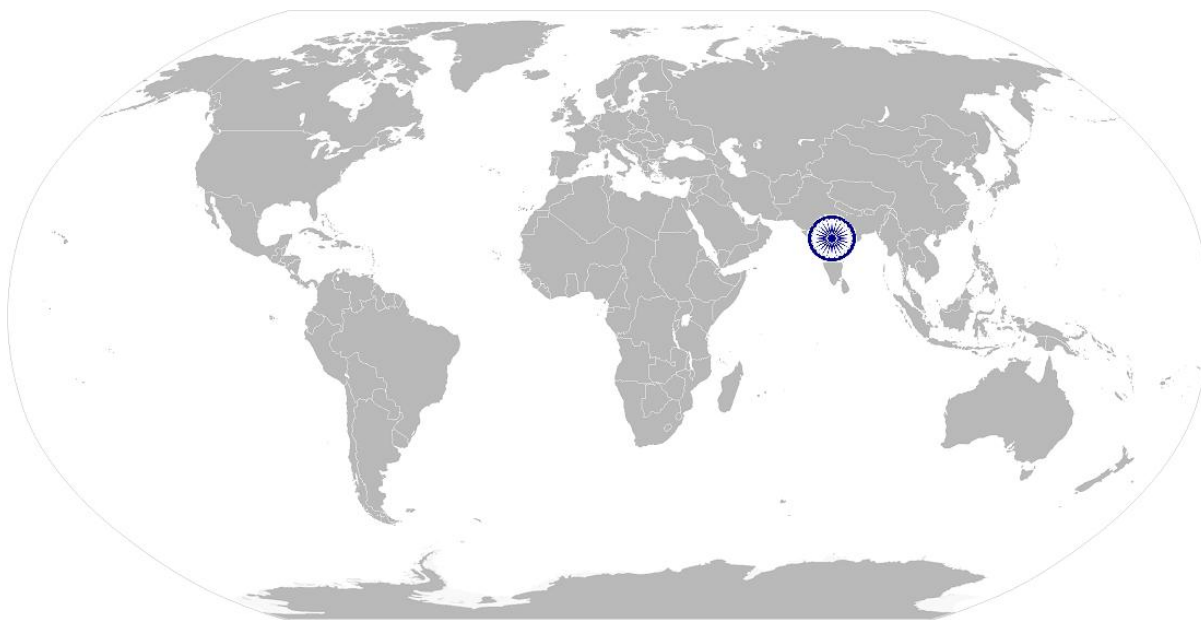
	The individual on the job needs to know and understand how to: SB6. make use of exposure visits to model farms SB7. build rapport with the experts and discuss possible solutions with them
	Problem Solving
	The individual on the job needs to know and understand how to: SB8. think through the problem, evaluate the possible solution(s) and take up an optimum / best possible solution(s) SB9. troubleshooting: Determine what is causing an operating error and deciding what to do about it
	Analytical Thinking
	The individual on the job needs to know and understand how to: SB10. apply, analyze, and evaluate the information gathered from observation, experience, reasoning, or communication, as a guide to thought and action
	Critical Thinking The individual on the job needs to know and understand how to: SB11. judge the safety of jobsites and quality of hand tools SB12. assess the health and conditions of trees, shrubs, plants and other planting materials SB13. take up one's own working and learning



AGR/N0801 Nursery Management and Propagation of Plant Material

NOS Version Control

NOS Code	AGR/N0801		
Credits(NSQF)	TBD	Version number	1.0
Sector	Agriculture And Allied	Drafted on	25/02/14
Sub-sector	Agriculture Crop Production	Last reviewed on	14/06/17
Occupation	Landscaping Gardening & Urban Farming	Next review date	14/06/21



AGR/N0802

Designing of Garden Components

National Occupational Standard



Overview

This unit deals with creating and designing various components of the garden for beautification of garden and landscape.

AGR / N0802
Designing of Garden Components

National Occupational Standard

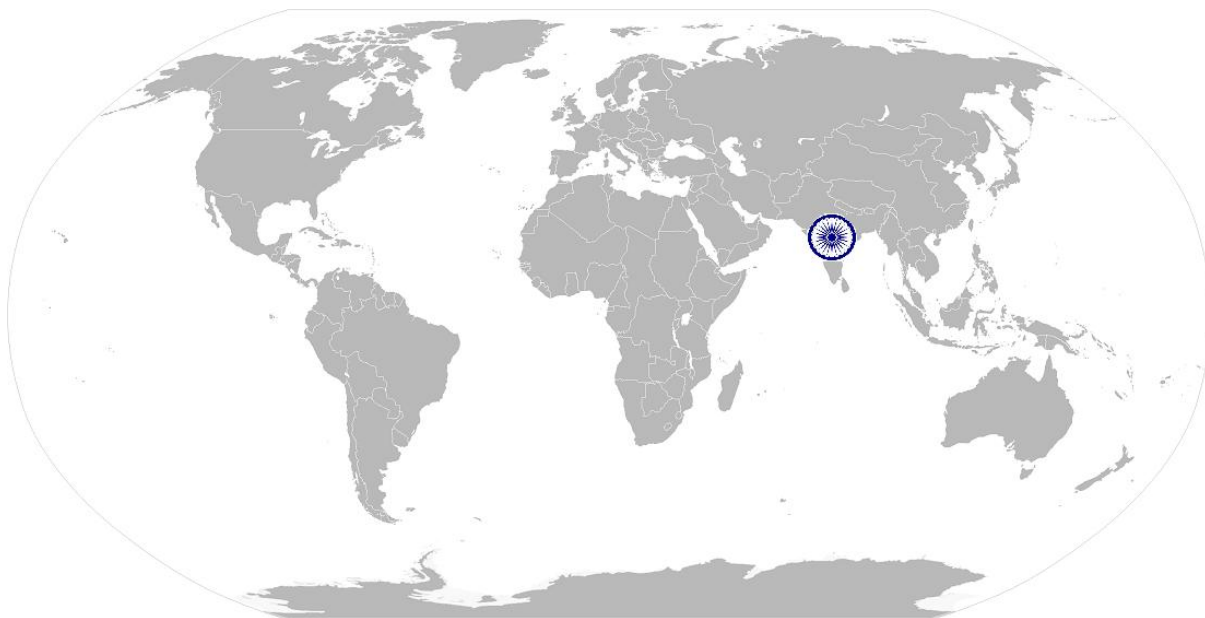
Unit Code	AGR/N0802
Unit Title (Task)	Designing of Garden Components
Description	This unit deals with creating and designing the various garden components in the field for beautification of garden and landscape.
Scope	This unit/task covers the following: <ul style="list-style-type: none"> • features of Garden • types of Garden • actual Design and Layout of Gardens
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
Features of Garden	To be competent, the individual on the job must be able to: <ul style="list-style-type: none"> PC1. design various components of Garden like hedge, edge, shrubbery, pergolas, flower bed, lawn, etc. PC2. visualise various components according to actual field PC3. use various components available in the garden area
Type of Gardens	To be competent, the individual on the job must be able to: <ul style="list-style-type: none"> PC4. design different types of gardens PC5. utilise the available space effectively for different type of gardens
Actual Design and Layout of Gardens	To be competent, the individual on the job must be able to: <ul style="list-style-type: none"> PC6. measure area for layout of garden components PC7. layout for components of garden in the field PC8. plan field design PC9. maintain the plants according to design
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	The user/individual on the job needs to know and understand: <ul style="list-style-type: none"> KA1. relevant legislation, standards, policies, and procedures in work KA2. relevant health and safety requirements applicable in the work environment KA3. own job role and responsibilities and sources for information pertaining to work KA4. who to approach for support in order to obtain work related information, clarifications and support KA5. importance of following health, hygiene, safety and quality standards and the impact of not following the standards on consumers and the business KA6. documentation and related procedures applicable in the context of work
B. Technical Knowledge	The individual on the job needs to know and understand: <ul style="list-style-type: none"> KB1. effective working relationships and how to work effectively with others in the gardening contexts KB2. types of gardens - Formal, informal, landscape, institutions, public gardens, parks, Hindu, Mughal, Japanese and English gardens etc KB3. basic landscaping and designs for the beautification of gardens like making gate, lawn, shrubbery, flower beds, borders, paths, hedges,

AGR / N0802
Designing of Garden Components

	edges, steps, statues, fountains, bird paths, streams, pools, waterfalls, rockery, arches, pergolas, hanging pots, bird paths (features of gardening) etc
Skills (S)	
A. Core Skills/ Generic Skills	Writing Skills
	The individual on the job needs to know and understand how to: SA1. mention the layout in the field with help of rope SA2. report problems to the appropriate personnel in a timely manner SA3. write descriptions and details about incidents in reports
	Reading Skills
	The individual on the job needs to know and understand how to: SA4. read instruction manuals for hand tool and equipments SA5. read instructions on work orders and landscape drawings
	Oral Communication (Listening and Speaking skills)
	The individual on the job needs to know and understand how to: SA6. receive instructions and seek advice from supervisors and managers SA7. provide direction and instructions to other workers SA8. lead staff meetings and worksite safety meetings SA9. speak with suppliers and contractors to inquire about availabilities of materials and supplies
B. Professional Skills	Decision Making
	The individual on the job needs to know and understand how to: SB1. choose work procedures, installation and planting techniques and equipment SB2. select appropriate hand tools and personal protection devices considering safety requirements, materials being used and project specifications SB3. follow basic arithmetic and algebraic principles
	Plan and Organize
	The individual on the job needs to know and understand how to: SB4. plan & organize various tasks of garden designs SB5. develop approaches for the implementing of design, idea etc
	Customer Centricity
	The individual on the job needs to know and understand how to: SB6. build relationship with the co-workers/customers using human centric approach SB7. make use of exposure visits to model farm
	Problem Solving
	The individual on the job needs to know and understand how to: SB8. think through the problem, evaluate the possible solution(s) and take up an optimum /best possible solution(s) SB9. troubleshooting: Determine what is causing an operating error and deciding what to do about it

AGR / N0802
Designing of Garden Components

	Analytical Thinking
	The individual on the job needs to know and understand how to: SB10. analyze needs and product requirements to create a design SB11. integrate various components of a garden to make a design
	Critical Thinking
	The individual on the job needs to know and understand how to: SB12. apply, analyze, and evaluate the information gathered from observation, experience, reasoning, or communication, as a guide to thought and action SB13. judge the safety of jobsites and quality of hand tools SB14. take up one's own working and learning

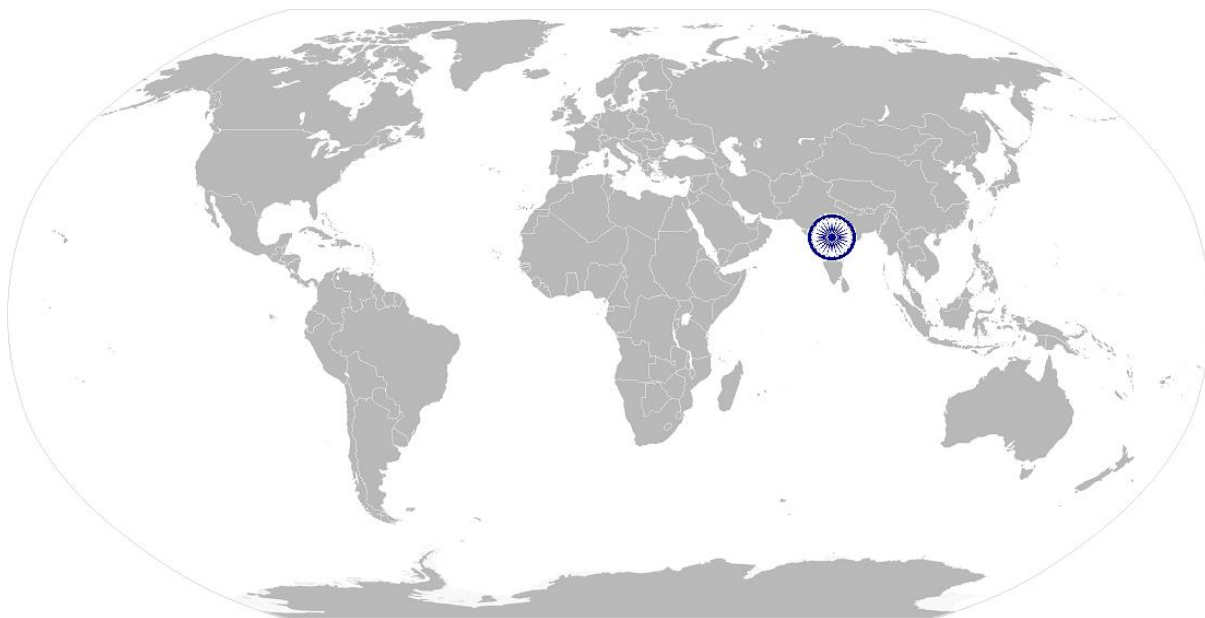


AGR / N0802

Designing of Garden Components

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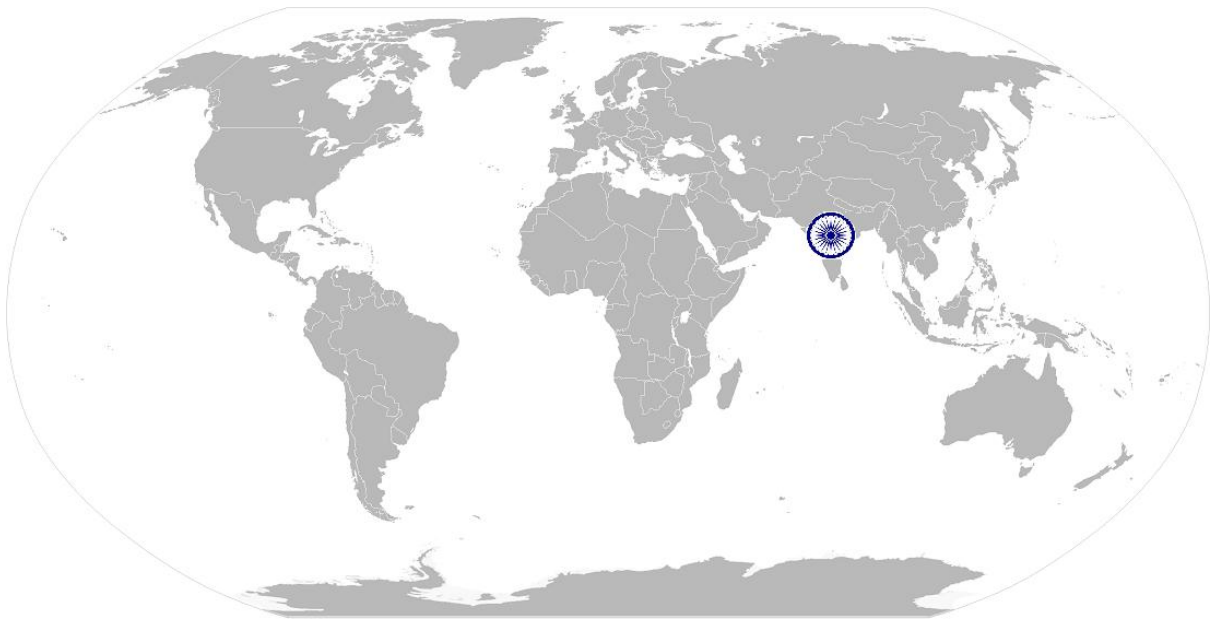
NOS Code	AGR/N0802		
Credits(NSQF)	TBD	Version number	1.0
Sector	Agriculture And Allied	Drafted on	25/02/14
Sub-sector	Agriculture Crop Production	Last reviewed on	14/06/17
Occupation	Landscaping Gardening & Urban Farming	Next review date	14/06/21



AGR/N0803

Plantation, Maintenance and Care of Garden

National Occupational Standard



Overview

This unit deals with planting, maintaining and taking care of the garden for the beautification of lawns and gardens

AGR/N0803
Plantation, Maintenance and Care of Garden

National Occupational Standard

Unit Code	AGR/N0803
Unit Title (Task)	Plantation, Maintenance and Care of Garden
Description	This OS unit deals with planting, maintaing and taking care garden for the beautification of lawns and gardens
Scope	This unit/task covers the following: <ul style="list-style-type: none"> Seasonal Gardening and Ground maintenance Soil and Soil Management Planting and Culture of Floral Display Training and Pruning Irrigation Pest and Disease management Other Operations
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
Seasonal Gardening And Ground Maintenance	To be competent, the individual on the job must be able to: <ul style="list-style-type: none"> PC1. maintain lawn and turf <ul style="list-style-type: none"> mowing fertilizing weeding irrigation aeration renovation PC2. plant and culture trees <ul style="list-style-type: none"> tree selection – type of tree based on location pit digging tree placement – use of crane & mechanical methods back filling staking incubating for replanting fertilizing irrigation shaping & pruning tree protection - pest and diseases, cattle, animals PC3. plant and culture trees, shrubs and plant covers <ul style="list-style-type: none"> general planting procedures general plant maintenance and care
Soil and Soil Management	To be competent, the individual on the job must be able to: <ul style="list-style-type: none"> PC4. maintain soil texture and structure PC5. take care of water and water movement PC6. take up soil nutrient management PC7. control soil erosion

AGR/N0803
Plantation, Maintenance and Care of Garden

Planting and Culture of Floral Display	To be competent, the individual on the job must be able to: PC8. plan and prepare bed PC9. plant & culture annuals, bulbs etc PC10. recommend plant spacing PC11. dehead flowers as per the recommended procedures
Training and Pruning	To be competent, the individual on the job must be able to: PC12. prune and trim trees, shrubs, and hedges, using shears, pruners, or chain saw etc PC13. use techniques to shape trees and shrubs as per the recommended procedures
Irrigation	To be competent, the individual on the job must be able to: PC14. install drip and sprinkler system as per the design PC15. Clean filters & drips for optimum flow PC16. understand water requirements of different plants PC17. use watering appliances like drip & sprinklers, water can, seedling water can, bucket, Syring and Garden hose etc as per the need and procedure
Pest & Disease Management	To be competent, the individual on the job must be able to: PC18. identify pest and diseases PC19. manage pest and diseases PC20. use chemical & non-chemical methods of pest & disease control
Other Operations	To be competent, the individual on the job must be able to: PC21. plant woody plants, bulbs and bedding plants, shrubbery, hedges and edges etc as per procedures PC22. Identify and grow indoor plants as per the design layout PC23. practice in making bonsai PC24. prepare potting mixture, potting and repotting. PC25. plant various fruits / crops as per the design and layout
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	The user/individual on the job needs to know and understand: KA1. relevant legislation, standards, policies, and procedures in work KA2. relevant health and safety requirements applicable in the work environment KA3. own job role and responsibilities and sources for information pertaining to work KA4. who to approach for support in order to obtain work related information, clarifications and support KA5. importance of following health, hygiene, safety and quality standards and the impact of not following the standards on consumers and the business KA6. documentation and related procedures applicable in the context of work
B. Technical Knowledge	The individual on the job needs to know and understand: KB1. effective working relationships and how to work effectively with others in the garden KB2. methods of planting & cultivate KB3. procedures of garden maintenance

AGR/N0803
Plantation, Maintenance and Care of Garden

	KB4. methods & advantages of integrated nutrient management KB5. principles of Nutrient Management KB6. floral display methods & procedures KB7. training & Pruning methods, their advantages & limitations KB8. laying & maintenance of drip & sprinkler KB9. types and methods of irrigation KB10. integrated pest & Disease Management KB11. types of chemicals & fertilizers available – causes and effects KB12. natural pesticides – causes & effects
Skills (S)	
A. Core Skills/ Generic Skills	Writing Skills
	The individual on the job needs to know and understand how to: SA1. mention the data which are required for record keeping purpose SA2. report problems to the appropriate personnel in a timely manner SA3. write descriptions and details about incidents in reports
	Reading Skills
	The individual on the job needs to know and understand how to: SA4. read instruction manuals for hand tool and equipments SA5. read instructions on work orders and landscape drawings SA6. read directions on pesticide and fertilizer labels for details of handling, mixing, and application and first aid procedures
	Oral Communication (Listening and Speaking skills)
	The individual on the job needs to know and understand how to: SA7. receive instructions and seek advice from supervisors and managers SA8. provide direction and instructions to other workers SA9. lead staff meetings and worksite safety meetings SA10. speak with suppliers and contractors to inquire about availabilities of materials and supplies
B. Professional Skills	Decision Making
	The individual on the job needs to know and understand how to: SB1. choose work procedures, installation and planting techniques and equipment SB2. select appropriate hand tools and personal protection devices considering safety requirements, materials being used and layouts
	Plan and Organize
	The individual on the job needs to know and understand how to: SB3. execute the design & its maintenance
	Customer Centricity
	The individual on the job needs to know and understand how to: SB4. make use of exposure visits to model farms SB5. Build relationship with customers and co-workers using customer centric

AGR/N0803

Plantation, Maintenance and Care of Garden

	approach
	Problem Solving
	The individual on the job needs to know and understand how to: SB6. think through the problem, evaluate the possible solution(s) and take up an optimum /best possible solution(s) SB7. troubleshooting: Determine what is causing an operating error and deciding what to do about it
	Analytical Thinking
	The individual on the job needs to know and understand how to: SB8. apply, analyze, and evaluate the information gathered from observation, experience, reasoning, or communication, as a guide to thought and action
	Critical Thinking
	The individual on the job needs to know and understand how to: SB9. judge the safety of jobsites and quality of hand tools SB10. assess the health and conditions of trees, shrubs, plants and lawns SB11. take up one's own working and learning



AGR/N0803
Plantation, Maintenance and Care of Garden

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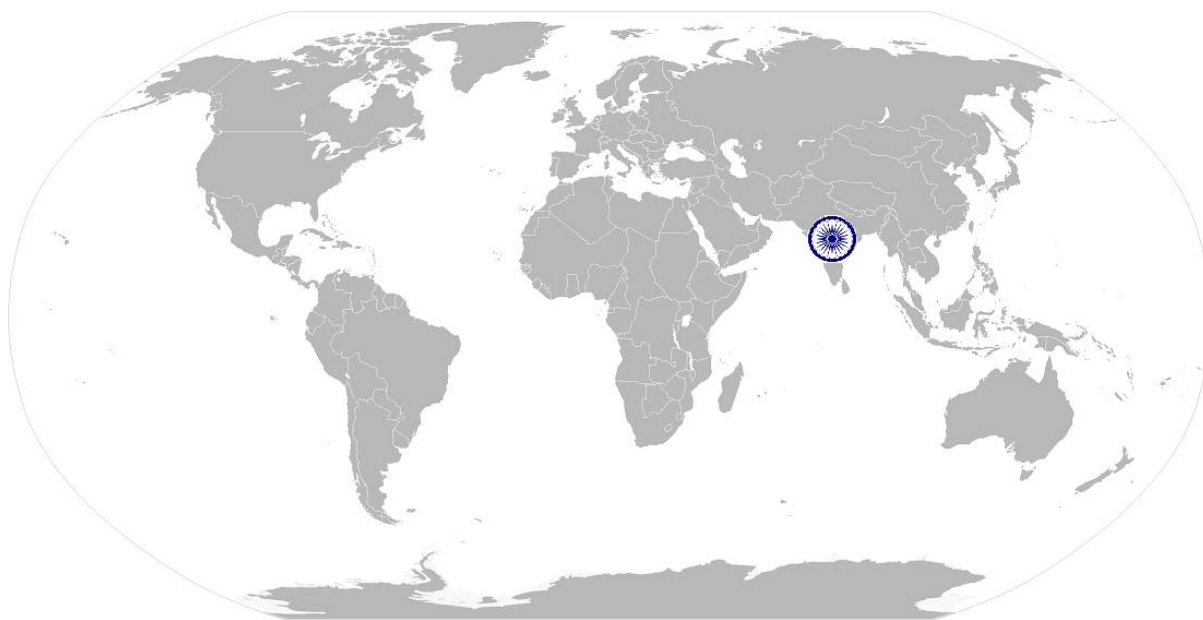
NOS Code	AGR/N0803		
Credits(NSQF)	TBD	Version number	1.0
Sector	Agriculture And Allied	Drafted on	25/02/14
Sub-sector	Agriculture Crop Production	Last reviewed on	14/06/17
Occupation	Landscaping Gardening & Urban Farming	Next review date	14/06/21



AGR/N9903

Maintain health & safety at the work place

National Occupational Standard



Overview

This unit is about dealing with health and safety of the farmers and co workers at workplace

AGR/N9903
Maintain health & Safety at the work place

National Occupational Standard

Unit Code	AGR/N9903
Unit Title (Task)	Maintain health and safety at the workplace
Description	This OS is for the cultivator who is responsible for maintaining health and safety of self and others co workers at workplace
Scope	This unit/task covers the following: <ul style="list-style-type: none"> maintain clean and efficient workplace render appropriate emergency procedures
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
Maintaining clean and efficient workplace	To be competent, the individual must be able to: <ul style="list-style-type: none"> PC1. undertake basic safety checks before operation of all machinery and vehicles and hazards are reported to the appropriate supervisor PC2. work for which protective clothing or equipment is required is identified and the appropriate protective clothing or equipment is used in performing these duties in accordance with workplace policy. PC3. read and understand the hazards of use and contamination mentioned on the labels of pesticides/fumigants etc PC4. assess risks prior to performing manual handling jobs, and work according to currently recommended safe practice. PC5. use equipment and materials safely and correctly and return the same to designated storage when not in use PC6. dispose of waste safely and correctly in a designated area PC7. recognise risks to bystanders and take action to reduce risk associated with jobs in the workplace PC8. perform your work in a manner which minimizes environmental damage all procedures and work instructions for controlling risk are followed closely. PC9. report any accidents, incidents or problems without delay to an appropriate person and take necessary immediate action to reduce further danger.
Render appropriate emergency procedures	To be competent, the individual must be able to: <ul style="list-style-type: none"> PC10. follow procedures for dealing with accidents, fires and emergencies, including communicating location and directions to emergency. PC11. follow emergency procedures to company standard / workplace requirements PC12. use emergency equipment in accordance with manufacturers' specifications and workplace requirements PC13. provide treatment appropriate to the patient's injuries in accordance with recognized first aid techniques PC14. recover (if practical), clean, inspect/test, refurbish, replace and store the first aid equipment as appropriate PC15. report details of first aid administered in accordance with workplace

AGR/N9903
Maintain health & Safety at the work place

	procedures.
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. relevant legislation, standards, policies, and procedures in work</p> <p>KA2. relevant health and safety requirements applicable in the work environment</p> <p>KA3. own job role and responsibilities and sources for information pertaining to work</p> <p>KA4. who to approach for support in order to obtain work related information, clarifications and support</p> <p>KA5. importance of following health, hygiene, safety and quality standards and the impact of not following the standards on consumers and the business</p> <p>KA6. documentation and related procedures applicable in the context of work</p>
B. Technical Knowledge	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. personal hygiene and fitness requirements</p> <p>KB2. your general duties under the relevant health and safety legislation</p> <p>KB3. what personal protective equipment and clothing should be worn and how it is cared for</p> <p>KB4. the correct and safe way to use materials and equipment required for your work</p> <p>KB5. the importance of good housekeeping in the workplace</p> <p>KB6. safe disposal methods for waste</p> <p>KB7. methods for minimizing environmental damage during work</p> <p>KB8. the risks to health and safety and the measures to be taken to control those risks in your area of work</p> <p>KB9. workplace procedures and requirements for the treatment of workplace injuries/illnesses.</p> <p>KB10. basic emergency first aid procedure</p> <p>KB11. local emergency services</p> <p>KB12. why accidents, incidents and problems should be reported and the appropriate action to take</p>
Skills (S)	
A. Core Skills/ Generic Skills	Writing Skills
	<p>The user/ individual on the job needs to know and understand how to:</p> <p>SA1. mention the data which are required for record keeping purpose</p> <p>SA2. report problems to the appropriate personnel in a timely manner</p> <p>SA3. write descriptions and details about incidents in reports</p>
	Reading Skills
	<p>The user/ individual on the job needs to know and understand how to:</p> <p>SA4. read instruction manual for hand tool and equipments</p>

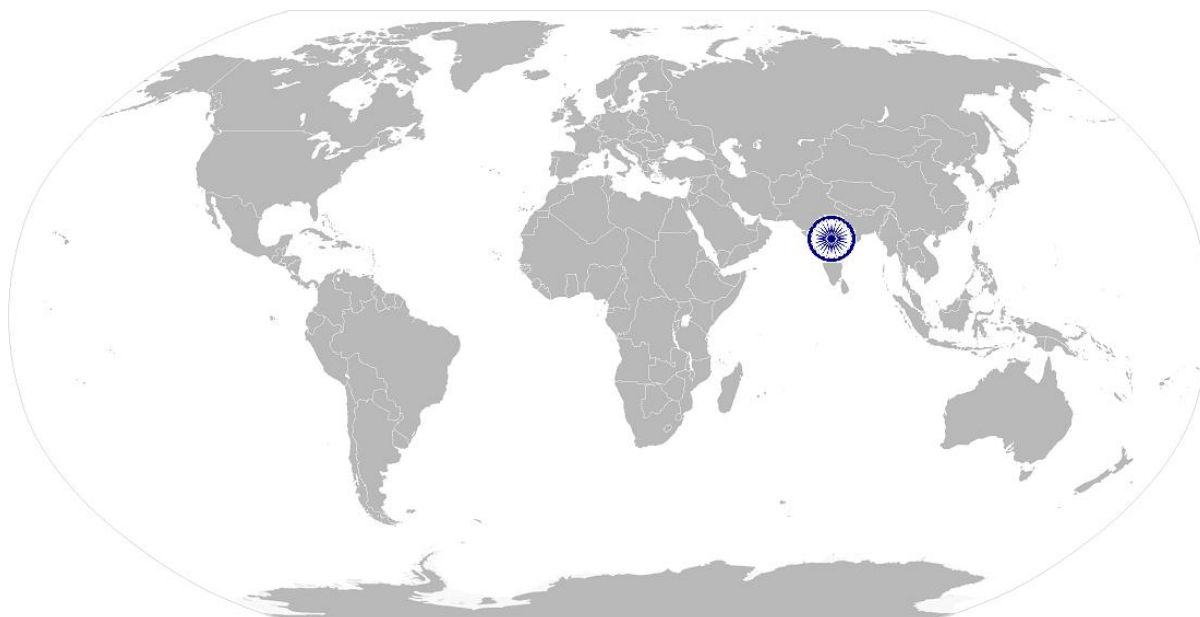
AGR/N9903
Maintain health & Safety at the work place

B. Professional Skills	Oral Communication (Listening and Speaking skills)
	The user/individual on the job needs to know and understand how to: SA5. communicate clearly and effectively with others like farmers, concerned officer/stakeholders SA6. comprehends information shared by senior people and experts
	Decision Making
	The user/individual on the job needs to know and understand how to: SB1. make decisions pertaining to types of tools to be used SB2. identify need of first aid and render it accordingly
	Plan and Organize
	The user/individual on the job needs to know and understand how to: SB3. schedule daily activities and drawing up priorities; allocate start times, estimation of completion times and materials, equipment and assistance required for completion.
	Customer Centricity
	The user/individual on the job needs to know and understand how to: SB4. manage relationships with co-workers and managers who may be stressed, frustrated, confused or angry
	Problem Solving
	The user/individual on the job needs to know and understand how to: SB5. think through the problem, evaluate the possible solutions and take up optimum / best solutions SB6. monitor and maintain the condition of tools and equipment
	Analytical Thinking
	The user/individual on the job needs to know and understand how to: SB7. assess situation & identify appropriate control measures
	Critical Thinking
	The user/individual on the job needs to know and understand how to: SB7. take up one's own working and learning

AGR/N9903
Maintain health & Safety at the work place

NOS Version Control

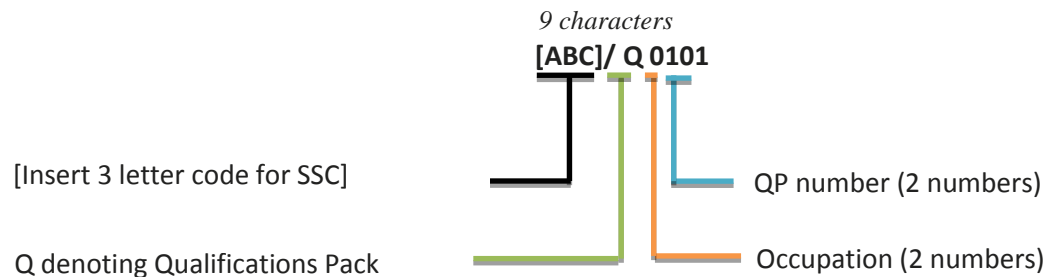
NOS Code	AGR/N9903		
Credits(NSQF)	TBD	Version number	1.0
Sector	Agriculture And Allied	Drafted on	25/02/14
Sub-sector	Agriculture Crop Production	Last reviewed on	14/06/17
Occupation	Landscaping Gardening& Urban Farming	Next review date	14/06/21



Annexure

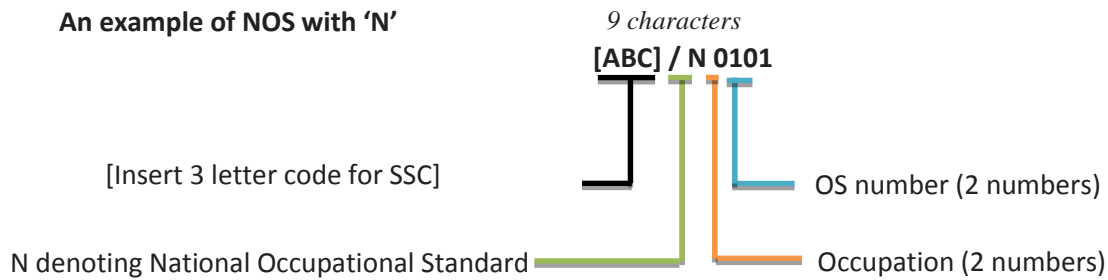
Nomenclature for QP and NOS

Qualifications Pack



Occupational Standard

An example of NOS with 'N'



The following acronyms/codes have been used in the nomenclature above:

Sub-sector	Range of Occupation numbers
Agriculture Crop Production	01 – 40
Dairying	41 – 42
Poultry	43 – 44
Animal Husbandry	45 – 48
Fisheries	49 – 51
Agriculture Allied Activities	52 – 60
Forestry, Environment and Renewable Energy Management	61 - 70
Agriculture Industries	71 – 90
Generic Occupations	96 - 99

Sequence	Description	Example
Three letters	Industry name	AGR
Slash	/	/
Next letter	Whether QP or NOS	Q or N
Next two numbers	Occupation code	01
Next two numbers	OS number	01

Note:

- The range of occupation numbers have been decided based on the number of existing and future occupations in a segment
- Occupation numbers from 91 – 95 have been intentionally left blank to accommodate any emerging segment in future

CRITERIA FOR ASSESSMENT OF TRAINEES

<u>Job Role</u>	Gardener
<u>Qualification Pack</u>	AGR/Q0801
<u>Sector Skill Council</u>	Agriculture

Guidelines for Assessment:

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.
2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
3. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/option NOS/set of NOS.
4. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below).
4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training center based on this criterion.
5. To pass the Qualification Pack , every trainee should score a minimum of 70% of aggregate marks to successfully clear the assessment.
6. In case of *unsuccessful completion*, the trainee may seek reassessment on the Qualification Pack.

Assessment outcomes	Assessment Criteria for outcomes	Total Mark	Out Of	Marks Allocation	
		(300)		Theory	Skills Practical
1.AGR /N0801 Nursery Management and Propagation of Plant Material	PC1.Establish physical infrastructure shade house, mist chamber, irrigation system	60	5	2	3
	PC2.Prepare soil mixtures		3	1	2
	PC3.Prepare seed beds		3	2	1
	PC4.Transplant seedlings		2	1	1
	PC5.Take up Potting of seedlings		2	1	1
	PC6.Take up hardening of seedlings		3	2	1
	PC7. Propagate plants through cuttings		5	2	3
	PC8. Practice layering and stooling (Guava)		5	2	3
	PC9. Practice grafting (Mango)		5	2	3
	PC10. Practice budding in rose / citrus		5	2	3
	PC11.Raise root stocks for grafting and budding		5	2	3
	PC12. Use Plastics for Nursery Operations		5	5	0
	PC13.Identify and grow indoor plants of their basic requirements		3	1	2
	PC14. Layout Nursery Area		5	0	5
	PC15. Identify and use proper root stock and scion for propagation		4	1	3
			60	26	34

2.AGR/N0802	PC1. Design various components of Garden like hedge, edge, shrubbery, pergolas, flower bed, lawn, etc.	75	15	8	7
Designing of Garden Components	PC2. Visualise various components according to actual field		5	3	2
	PC3. Use various components available in the garden area		5	3	2
	PC4. Design different types of gardens		15	9	6
	PC5. Utilise the available space effectively for different type of gardens		5	3	2
	PC6. Measure area for layout of garden components		5	3	2
	PC7. Layout for components of garden in the field		10	7	3
	PC8. Plan field design		10	5	5
	PC9. Maintain the plants according to design		5	2	3
			75	43	32
3. AGR/N0803	PC1. Maintain Lawn and Turf	150	10	5	5
Plantation, Maintenance and Care of Garden	PC2. Plant and Culture of Trees		15	7	8
	PC3. Plant and Culture Trees shrubs and plant covers		10	5	5
	PC4. Maintain texture and structure		4	2	2
	PC5. Take care of Water and Water Movement		4	2	2
	PC6. Take up Soil Nutrient Management		5	3	2
	PC7. Control soil erosion		4	2	2
	PC8. Plan and prepare bed		5	3	2
	PC9. Plant & culture annuals, bulbs etc		5	2	3
	PC10. Recommend plant Spacing		5	2	3
	PC11. Dehead flowers as per the recommended procedures		5	3	2
	PC12. Prune and trim trees, shrubs, and hedges, using shears, pruners, or chain saw etc		5	3	2
	PC13. Use techniques to shape trees and shrubs as per the recommended procedures		4	2	2
	PC14. Install drip and sprinkler system as per the design		10	5	5
	PC15. Clean filters & drips for optimum flow		4	2	2
	PC16. Understand Water requirements of different plants		4	2	2
	PC17. Use watering appliances like Drip & Sprinklers, Water can, Seedling water can, Bucket, Syring and Garden hose etc as per the need and procedure		4	2	2
	PC18. Identify Pest and diseases		5	2	3
	PC19. Manage pest and diseases		5	3	2
	PC20. Use chemical & non-chemical methods of pest & disease control		5	2	3
	PC21. Plant woody plants, bulbs and bedding plants, shrubbery, hedges and edges etc as per procedures		4	2	2

	PC22. Identify and grow indoor plants as per the design layout		4	2	2
	PC23.Practice in making bonsai		10	5	5
	PC24.Prepare potting mixture, potting and repotting.		4	2	2
	PC25. Plant various fruits / crops as per the design and layout		10	5	5
			150	75	75
4. AGR/N9903 Maintain health & Safety at the workplace	PC1.undertake basic safety checks before operation of all machinery and vehicles and hazards are reported to the appropriate supervisor	15	1	0	1
	PC2.work for which protective clothing or equipment is required is identified and the appropriate protective clothing or equipment is used in performing these duties in accordance with workplace policy.		1	1	0
	PC3.read and understand the hazards of use and contamination mentioned on the labels of pesticides/fumigants etc		1	1	0
	PC4. assess risks prior to performing manual handling jobs, and work according to currently recommended safe practice.		1	0	1
	PC5.use equipment and materials safely and correctly and return the same to designated storage when not in use		1	0	1
	PC6.dispose of waste safely and correctly in a designated area		1	0	1
	PC7. recognise risks to bystanders and take action to reduce risk associated with jobs in the workplace		1	1	0
	PC8.perform your work in a manner which minimizes environmental damage all procedures and work instructions for controlling risk are followed closely.		1	0	1
	PC9.report any accidents, incidents or problems without delay to an appropriate person and take necessary immediate action to reduce further danger.		1	0	1
	PC10.follow procedures for dealing with accidents, fires and emergencies, including communicating location and directions to emergency.		1	1	0
	PC11.follow emergency procedures to company standard / workplace requirements		1	1	0
	PC12.use emergency equipment in accordance with manufacturers' specifications and workplace requirements		1	0	1
	PC13.provide treatment appropriate to the patient's injuries in accordance with recognized first aid techniques		1	0	1
	PC14.recover (if practical), clean, inspect/test, refurbish, replace and store the first aid equipment as appropriate		1	0	1
	PC15.report details of first aid administered in accordance with workplace procedures.		1	1	0
			15	6	9
		300	300	150	150