

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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Quaifications 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 Details

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: 1. <u>AGR / N0801- Nursery Management and Propagation of Plant Material</u> 2. <u>AGR / N0802- Designing of Garden Components</u> 3. <u>AGR / N0803-Plantation, Maintenance and Care of Garden</u> 4. <u>AGR/N9903- Maintain health & Safety at the work place</u>
Performance Criteria	As described in the relevant OS units

Qualifications Pack For Gardener





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 educational, training and other criteria required to perform a job re 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.		





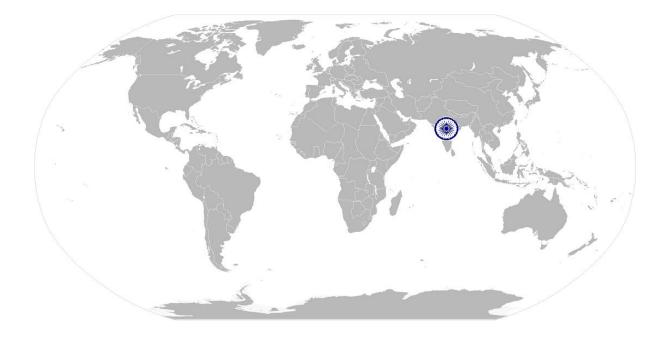
Vertical	Vertical may exist within a sub-sector representing different domain areas or the client industries served by the industry
Keywords /Terms	Description
OS	Occupation Standard
NOS	National Occupation Standard
NSQF	National Skills Qualification Framework
Agr	Agriculture





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.





N·S·D·C National Skill Development Corporation

AGR/N0801 Nursery Management and Propagation of Plant Material

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: Nursery management Propagation techniques Some other operations
Performance Criteria(P	C) w.r.t. the Scope
Element	Performance Criteria
Nursery Management	 To be competent, the individual on the job must be able to: 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	 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	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 Unders	tanding (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





AGR/N0801 N	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, materialsbeing 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

NOS	
National Occupational Standards	



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

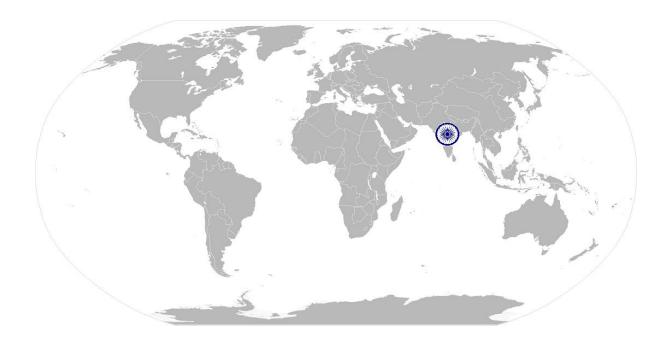






AGR/N0801 Nursery Management and Propagation of Plant Material

NOS 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

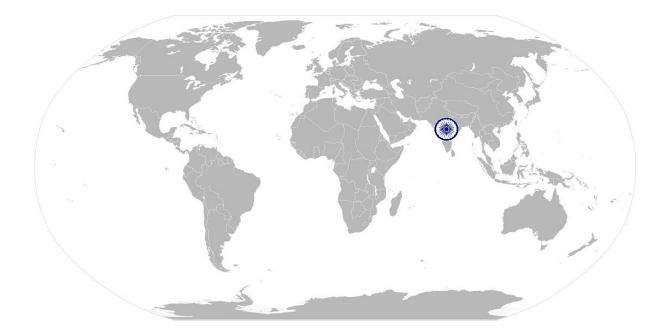






Designing of Garden Components

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
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: 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: 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: PC4. design different types of gardens PC5. ulitise the available space effectively for different type of gardens
Actual Design and Layout of Gardens	To be competent, the individual on the job most be able to: 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 Understand	ling (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 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,

NOS	
National Occupational Standards	





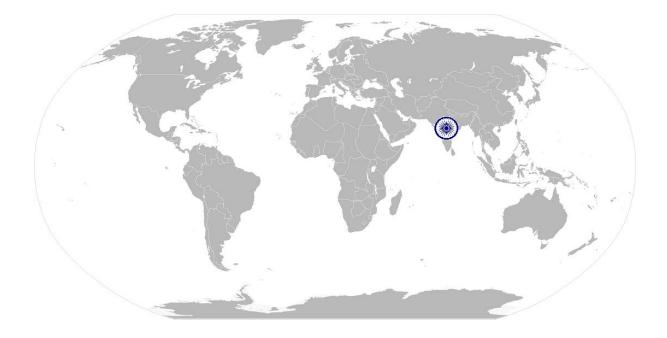
AGR / N0802	Designing of Garden Components
	edges, steps, statues, fountains, bird paths, streams, pools, waterfalls, rockery, arches, pergolas, hanging pots, bird paths (features of gardening) etc
Skills (S)	
A. Core Skills/ Generic	Writing Skills
Skills	
341113	 The individual on the job needs to know 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 inquire about availabilities of materials and supplies
B. Professional Skills	Decision Making
	 The individual on the job needs to know and understand jow 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		





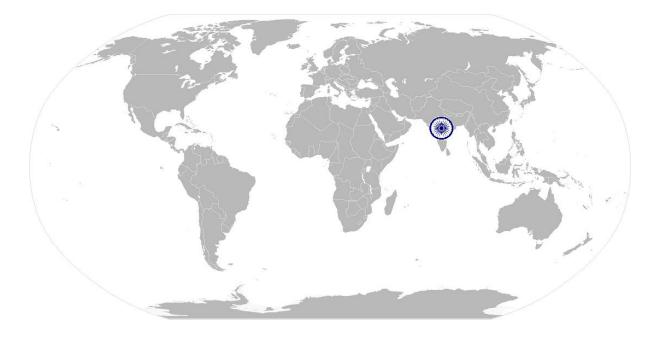




AGR / N0802

Designing of Garden Components

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









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



National Occupational Standard





AGR/N0803	Plantation, Maintenance and Care of Garden		
Unit Code	AGR/N0803		
Unit Title	Plantation, Maintenance and Care of Garden		
(Task)			
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:		
	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)	v.r.t. the Scope		
Element	Performance Criteria		
Seasonal Gardening And	To be competent, the individual on the job must be able to:		
Ground Maintenance	PC1. maintain lawn and turf		
	• mowing		
	fertilizing		
	• weeding		
	• irrigation		
	aeration		
	• renovation		
	PC2. plant and culture trees		
	 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		
	general planting procedures		
	general plant maintenance and care		
Soil and Soil Management			
	PC4. maintain soil texture and structure		
	PC5. take care of water and water movement		
	PC6. take up soil nutrient management		
	PC7. control soil erosion		





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AGR/N0803	Plantation, Maintenance and Care of Garden		
Planting and Culture of	To be competent, the individual on the job must be able to:		
Floral Display	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	To be competent, the individual on the job must be able to:		
Management	PC18. identify pest and diseases		
	PC19. manage pest and diseases		
Other Operations	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		
	PC23. prepare potting mixture, potting and repotting.		
	PC24. prepare potting mixture, potting and repotting. PC25. plant various fruits / crops as per the design and layout		
Knowledge and Understand			
A. Organizational	The user/individual on the job needs to know and understand:		
Context (Knowledge of	KA1. relevant legislation, standards, policies, and procedures in work		
	KA2. relevant health and safety requirements applicable in the work		
the company /			
organization and its	environment		
processes)	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	The individual on the job needs to know and understand:		
Knowledge	KB1. effective working relationships and how to work effectively with others		
	in the garden		
	KB2. methods of planting & cultivate		
	KB3. procedures of garden maintenance		
	KBS. procedures of garden maintenance		





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Transforming the skill landscape

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
Skills (S)	KB12. natural pesticides – causes & effects
A. Core Skills/ Generic	Writing Skills
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 tandscape 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, materialsbeing 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 farmsSB5. 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	

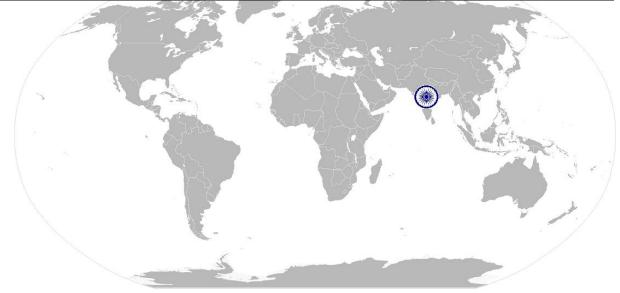






Plantation, Maintenance and Care of Garden

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



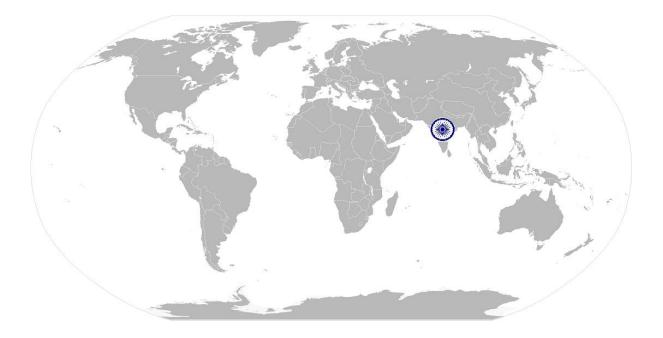






Maintain health & safety at the work place

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	
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: 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: 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 	
Render appropriate emergency procedures	further danger. To be competent, the individual must be able to: 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	

National Occupational Standards



pment

AGR/N9903

Maintain health & Safety at the work place

	procedures.	
Knowledge and Understand	ling (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 user/individual on the job needs to know and understand: KB1. personal hygiene and fitness requirements KB2. your general duties under the relevant health and safety legislation KB3. what personal protective equipment and clothing should be worn and how it is cared for KB4. the correct and safe way to use materials and equipment required for your work KB5. the importance of good housekeeping in the workplace KB6. safe disposal methods for waste KB7. methods for minimizing environmental damage during work KB8. the risks to health and safety and the measures to be taken to control those risks in your area of work KB9. workplace procedures and requirements for the treatment of workplace injuries/illnesses. KB10. basic emergency first aid procedure KB11. local emergency services KB12. why accidents, incidents and problems should be reported and the appropriate action to take 	
Skills (S)		
A. Core Skills/ Generic Skills	Writing Skills The user/ ndividual 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 user/ individual on the job needs to know and understand how to:	
	SA4. read instruction manual for hand tool and equipments	





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AGR/N9903 Maintain health & Safety at the work place

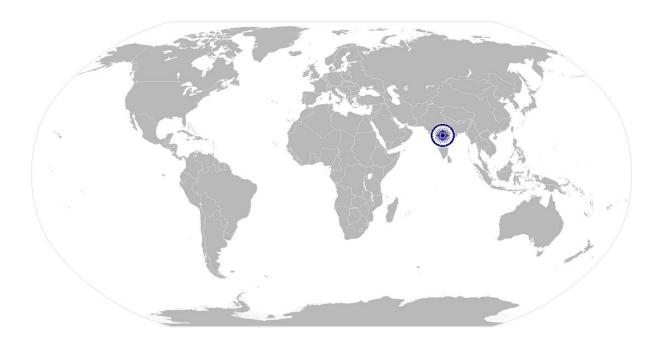
	Oral Communication (Listening and Speaking skills)
	 The user/individual on the jobneeds to know and understand how to: SA5. communicate clearly and effectively with others like farmers, concerned officer/stakeholders SA6. comprehends information shared by senior people and experts
B. Professional Skills	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





Maintain health & Safety at the work place

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		



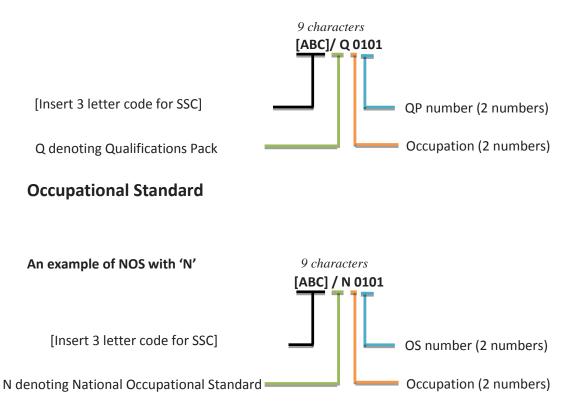
Qualification Pack For Gardener



Annexure

Nomenclature for QP and NOS

Qualifications Pack





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



Qualification Pack For Gardener

CRITERIA FOR ASSESSMENT OF TRAINEES

Job Role	Gardener
Qualification Pack	AGR/Q0801
Sector Skill Council	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		Total Mark	Out Of	Marks Allocation	
outcomes	Assessment Criteria for outcomes	(300)		Theory	Skills Practical 3 2 1 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
1.AGR /N0801 Nursery	PC1.Establish physical infrastructure shade house, mist chamber, irrigation system	60	5	2	3
Management and	PC2.Prepare soil mixtures		3	1	2
Propagation of Plant Material	PC3.Prepare seed beds	-	3	2	1
Wateria	PC4.Transplant seedlings		2	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. Ulitise 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	PC1.undertake basic safety checks before operation of all machinery and vehicles and hazards are reported to the appropriate supervisor	15	1	0	1
workplace	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

SSC	QPCode	Name of the QP	NSQF Level	Equipment Name	Minimum number of Equipment required (per batch of 30	Unit Type	Is this a mandatory Equipment to be available at the Training Center (Yes/No)	Dimension/Specifi cation/Descriptio n of the Equipment/ ANY OTHER REMARK
Agriculture	AGR/Q0801	Gardener		Kassi / Spade	2	Nos	Ν	
Agriculture	AGR/Q0801	Gardener		Khurpi	2	Nos	Ν	
Agriculture	AGR/Q0801	Gardener		Weeder	1	Nos	Ν	
Agriculture	AGR/Q0801	Gardener		Side shear	1	Nos	Ν	
Agriculture	AGR/Q0801	Gardener		Broom	1	Nos	Ν	
Agriculture	AGR/Q0801	Gardener		Rake	1	Nos	Ν	
Agriculture	AGR/Q0801	Gardener		Hand hose	2	Nos	Ν	
Agriculture	AGR/Q0801	Gardener		Watering Can	2	Nos	Ν	
Agriculture	AGR/Q0801	Gardener		Grass Cutter	1	Nos	Y	
Agriculture	AGR/Q0801	Gardener		Budding & Grafting Set	2	Set	Y	
Agriculture	AGR/Q0801	Gardener		Secateur	2	Nos	У	Qty 1
Agriculture	AGR/Q0801	Gardener		Buckets	2	Nos	У	15 ltr Qty 1
Agriculture	AGR/Q0801	Gardener		Hedge Cutter	2	Nos	У	Qty 1
Agriculture	AGR/Q0801	Gardener		Tree Pruner	2	Nos	У	Qty 1
Agriculture	AGR/Q0801	Gardener		Poly House with Misting	1	Nos	Ν	
Agriculture	AGR/Q0801	Gardener		Shed net house	1	Nos	N	
Agriculture	AGR/Q0801	Gardener		Wheel Barrow	1	Nos	Ν	
Agriculture	AGR/Q0801	Gardener		Hand Sprayer (Small & Big)	2	Nos	Y	
Agriculture	AGR/Q0801	Gardener		Hand Gloves	1	Nos	Ν	
Agriculture	AGR/Q0801	Gardener		Earthen Pots	10	Nos	N	
Agriculture	AGR/Q0801	Gardener		Plastic Pots	10	Nos	N	
Agriculture	AGR/Q0801	Gardener		Polythene Bags (Garbage)	10	Nos	Ν	
Agriculture	AGR/Q0801	Gardener		Seed Packets	4	Nos	Y	50 gm each
Agriculture	AGR/Q0801	Gardener		Gunny bags	6	Nos	Ν	
Agriculture	AGR/Q0801	Gardener		Tags-labels	10	Nos	Y	
Agriculture	AGR/Q0801	Gardener		Budding-tape	1	Nos	Y	
Agriculture	AGR/Q0801	Gardener		Sutli	1	Bundle	Ν	
Agriculture	AGR/Q0801	Gardener		Moss-grass	10	Kg	У	! Kg

Agriculture	AGR/Q0801	Gardener	Polythene sheets	10	Nos	Ν	
Agriculture	AGR/Q0801	Gardener	Grass Mower	1	Nos	Y	
Agriculture	AGR/Q0801	Gardener	Flower vases	3	Nos	Y	
Agriculture	AGR/Q0801	Gardener	Pin holder	3	Nos	Y	