



## **Model Curriculum**

### Gardener

SECTOR: AGRICULTURE & ALLIED SUB-SECTOR: AGRICULTURE CROP PRODUCTION OCCUPATION: LANDSCAPING GARDENING& URBAN FARMING REF ID: AGR/Q0801, v1.0 NSQF LEVEL: 4







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# Gardener

#### **CURRICULUM / SYLLABUS**

This program is aimed at training candidates for the job of a "<u>Gardener</u>", in the "<u>Agriculture & Allied</u>" Sector/Industry and aims at building the following key competencies amongst the learner

Program Name	Gardener				
Qualification Pack Name & Reference ID. ID	AGR/Q0801, v1.0				
Version No.	1.0 Version Update Date				
Pre-requisites to Training	5 <sup>th</sup> Standard pass, preferably				
Training Outcomes	<ul> <li>After completing this programme, participants will be able to:         <ul> <li>Identify and use basic tools, equipment &amp; materials: Effectively identify, select &amp; use the specified tools and equipment relevant to gardening works.</li> <li>Prepare root stocks: Preparing root stocks for grafting, budding</li> <li>Layout and design the Garden component: Area Measurement and planning for the layout and design of garden. Proper landscaping.</li> <li>Maintain the Garden: identify and select the tools for Pruning, training, trimming and develop healthy Garden.</li> <li>Become well versed with Environment Health &amp; Safety: Well versed with health and safety measures in terms of personal safety and others as well.</li> </ul> </li> </ul>				





This course encompasses <u>4</u> out of <u>4</u> National Occupational Standards (NOS) of "<u>Gardener</u>" Qualification Pack issued by "<u>Agriculture Skill Council of India</u>".

Sr. No.	Module	Key Learning Outcomes	Equipment Required
1	Introduction Theory Duration (hh:mm) 25:00 Practical Duration (hh:mm) 10:00 Corresponding NOS Code	<ul> <li>Understand and perform General Discipline in the class room (Do's &amp; Don'ts)</li> <li>Understand the Role of a Gardener</li> <li>Study and understand Types of Gardens</li> <li>Gain knowledge about the Aesthetic value of garden.</li> <li>Study the Value in terms of money for gardening</li> <li>Study the Planting materials for gardening.</li> </ul>	Laptop, white board, marker, projector
2	Nursery Management and Propagation of Plant Material         Theory Duration (hh:mm) 30:00         Practical Duration (hh:mm) 50:00         Corresponding NOS Code AGR / N0801	<ul> <li>Identify appropriate garden crops as per soil &amp; climatic conditions.</li> <li>Prepare nursery bed &amp; seedlings</li> <li>Transplant the seedlings</li> <li>Maintain farm book keeping</li> <li>Prepare the root stocks and practice Propagation techniques.</li> <li>Practice cutting, grafting, budding and layering techniques</li> <li>Establish the physical infrastructure like shade house, green house, mist chamber, irrigation system.</li> <li>Understand the soil mixtures and seed beds.</li> <li>Understand the basic botany for garden crops.</li> <li>Gain knowledge about the Water, Media &amp; Nutrition requirement for garden crops.</li> <li>Study the Fertilizer requirement of garden crops.</li> <li>Practice Pest &amp; Disease Management of garden crops.</li> <li>Understand the irrigation methods /requirements of garden crops.</li> <li>Maintain cleanliness in nursery by sweeping trashes and pulling out dead plant parts etc.</li> </ul>	Laptop, white board, marker, projector, Seedling Tray, sacks, polythene, watering cans and equipments, shade net, green house/shade house, plant labels, labellers, spade, khurpi
3	Designing of Garden Components Theory Duration (hh:mm) 40:00 Practical Duration	<ul> <li>Understand the features of Garden.</li> <li>Gain knowledge about the different types of Garden</li> <li>Plan for the Design and Layout of Gardens.</li> <li>Layout &amp; prepare the lawn</li> <li>Layout of orchard, plant fruit plants in the field</li> <li>Understand the different components of</li> </ul>	Laptop, white board, marker, projector, spade, khurpi, shears, loppers, hedge cutters







Sr. No.	Module	Key Learning Outcomes	Equipment Required
	(hh:mm) 60:00 Corresponding NOS Code AGR/N0802	garden. • Implement the techniques to beautify the gardens.	
4			Laptop, white board, marker, projector, Hedge cutter, shears, loppers, sprayers, plant labels, pesticides, fertilizers, water pumps and equipments, watering timers and controllers
5	Maintain Health & Safety at the work place Theory Duration (hh:mm) 10:00 Practical Duration (hh:mm) 10:00 Corresponding NOS Code AGR/N9903	<ul> <li>dusters</li> <li>Understand the basic safety measures.</li> <li>Understand the minimization of environmental damage during farm operations.</li> <li>Proper use of equipment.</li> <li>Practice General safety and first aid</li> </ul>	Hand Gloves, Mask, Pair of shoes, first aid kit
	Total Duration: Theory Duration (hh:mm) 130:00 Practical Duration	Unique Equipment Required: Laptop, white board, marker, projector, Seedling polythene, watering cans and equipments, shad house/shade house, plant labels, labellers, spade loppers, hedge cutters, sprayers, plant labels, pe fertilizers, water pumps and equipments, wateri controllers, Hand Gloves, Mask, Pair of shoes, fir	e net, green e, khurpi, shears, sticides, weedicides, ng timers and





Sr. No.	Module	Key Learning Outcomes	Equipment Required
	(hh:mm) <b>170:00</b>		

Grand Total Course Duration: 300 Hours, 0 Minutes

(This syllabus/ curriculum has been approved by <u>Agriculture Skill Council of India)</u>





### Trainer Prerequisites for Job role: <u>"Gardener"</u> mapped to Qualification Pack: <u>"AGR/Q0801, v1.0"</u>

Sr. No.	Area	Details
1	Description	Trainer is responsible for educating the trainees – Nursery Management, Designing, beautification of lawns and gardens for private Houses, Parks, and Hotels in order to attract customers.
2	Personal Attributes	The individual should be able to demonstrate skills of designing, maintaining garden, use of various tools, communication skills, observation skills, practical oriented skills and decision making for instant problem solving. Trainer should be Subject Matter Expert.
3	Minimum Educational Qualifications	Diploma
4a	Domain Certification	Certified for Job Role: " <u>Gardener</u> " mapped to QP: <u>"AGR/Q0801, v1.0"</u> . Minimum accepted score is 80%.
4b	Platform Certification	Certified for the Job Role: "Trainer", mapped to the Qualification Pack: "MEP/Q0102". Minimum accepted score is 80%
5	Experience	<ul> <li>Post graduate(Horticulture/Agriculture/Botany)</li> <li>Graduate(Horticulture/Agriculture/Botany) with 6 months of relevant work experience</li> <li>Diploma with 3 years of relevant work experience</li> <li>10+2 with 5 years of relevant work experience</li> </ul>





#### Annexure: Assessment Criteria

Assessment Criteria	
Job Role	Gardener
Qualification Pack	AGR/Q0801, v1.0
Sector Skill Council	Agriculture

Sr.	Guidelines for Assessment
No.	
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 <i>unsuccessful completion</i> , the trainee may seek reassessment on the Qualification Pack.







Assessable	Assessment Criteria	Total Mark	Out Of	Marks Allocation	
Outcome		(300)		Theory	Skills Practical
<ol> <li>AGR / N</li> <li>0801- Nursery</li> <li>Management</li> </ol>	PC1. Establish of physical infrastructure – shade house, mist chamber, irrigation system		5	2	3
and Propagation of Plant Material	PC2. Prepare of soil mixtures		3		
	PC3. Prepare of seed beds			1	2
	PC4. Transplant		3	2	1
	PC5. Take up Potting		2	1	1
	PC6. Take up Hardening	60	2	1	1
	PC7. Propagate of plants through		3	2	1
	cuttings		5	2	3
	PC8. Practice layering and stooling (Guava)		5	2	3
	PC9. Practice grafting (Mango)		E	2	3
	PC10. Practice budding in rose / citrus		5	2	3
	PC11. Raise of root stocks for grafting and budding		5	2	3
	PC12. Use of Plastics for Nursery		5	2	3
	Operations		5	5	0
	PC13. Identify and grow indoor plants of their basic requirements				
	PC14. Layout Nursery Area		3	1	2
			5	0	5







	PC15. Identify and use of proper root stock and scion for propagation				
			4	1	3
	Total		60	26	34
2. AGR / N 0802 -	PC1. Design various components of Garden like hedge, edge, shrubbery, pergolas, flower bed, lawn, etc.				
Designing of Garden	PC2. Visualize various components		15	8	7
Components	according to actual field				
			5	3	2
	PC3. Use various components available in the garden area				
	PC4. Design different types of gardens		5	3	2
	PC4. Design different types of gardens				
			15	9	6
	PC5. Ulitise the available space effectively for different type of gardens	75			
	PC6. Measure area for layout of garden		5	3	2
	components				
			5	3	2
	PC7. Layout for components of garden in the field			_	
	PC8. Plan field design		10	7	3
	PC9. Maintain the plants according to		10	5	5
	design				
			5	2	3
	Total		75	43	32
3. AGR / N	PC1. Maintain Lawn and Turf				
0803 - Plantation,					
Maintenance	PC2. Plant and Culture of Trees		10	5	5
and Care of Garden		150			
Jaruen			15	7	8
	PC3. Plant and Culture Trees shrubs and plant covers				
			10	5	5





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PC5. Take care of Water and Water Movement	4	2	
		2	
	4	2	
PC6. Take up Soil Nutrient Management	T	£	
	5	3	
PC7. Control Erosion			
	4	2	
PC8. Plan and preparation of Bed			
	5	3	
PC9. Plant & culture of annuals, bulbs etc			
	5	2	
PC10. Recommend plant Spacing			
	5	2	
PC11. Deheading of flowers as per the recommended procedures			
	5	3	
PC12. Prune and trim trees, shrubs, and hedges, using shears, pruners, or chain saw etc			
	5	3	
PC13. Use techniques to shape trees and shrubs as per the recommended procedures			
PC14. Install drip and sprinkler system as per the design	4	2	
	10	5	
PC15. Clean of filters & drips for optimum flow	10	J	
	4	2	
PC16. Understand Water requirements of different plants			
	4	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	
PC18. Identify Pest and diseases			
	5	2	





l	PC19. Manage pest and diseases		I	l	
	PC20. Use chemical & non-chemical		5	3	2
	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 growing of indoor plants as per the design layout				
	PC23. Practice in making bonsai		4	2	2
	U U				
	PC24. Prepare potting mixture, potting		10	5	5
	and repotting.				
	PC25. Plant various fruits / crops as per		4	2	2
	the design and layout				
			10	5	5
	Total		150	75	75
4. AGR/N9903 Maintain Health and	PC1. undertake basic safety checks before operation of all machinery and vehicles and hazards are reported to the				
safety at the	appropriate supervisor		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	15	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





Percentage Weightage:           Minimum Pass% to qualify	-		<u>50%</u>	<u>50%</u> 70%
Total	300	300	150	150
		15	6	9
PC15. report details of first aid administered in accordance with workplace procedures.		1	1	0
PC14. recover (if practical), clean, inspect/test, refurbish, replace and store the first aid equipment as appropriate		1	0	1
PC13. provide treatment appropriate to the patient's injuries in accordance with recognized first aid techniques		1	0	1
PC12. use emergency equipment in accordance with manufacturers' specifications and workplace requirements		1	0	1
PC11. follow emergency procedures to company standard / workplace requirements		1	1	0
PC10. follow procedures for dealing with accidents, fires and emergencies, including communicating location and directions to emergency.		1	1	0
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
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
PC7. recognize risks to bystanders and take action to reduce risk associated with jobs in the workplace		1	1	0