

Model Curriculum

Organic Grower

SECTOR: AGRICULTURE & ALLIED
SUB-SECTOR: AGRICULTURE CROP PRODUCTION
OCCUPATION: FARM MANAGEMENT
REF ID: AGR/Q1201, V1.0
NSQF LEVEL: 4



Certificate

CURRICULUM COMPLIANCE TO QUALIFICATION PACK – NATIONAL OCCUPATIONAL STANDARDS

is hereby issued by the

AGRICULTURE SKILL COUNCIL OF INDIA

for the

MODEL CURRICULUM

Complying to National Occupational Standards of
Job Role/Qualification Pack: 'Organic Grower' QP No. 'AGR/Q1201 NSQF Level 4'

Date of Issuance: June 30th, 2015

Valid up to: March 31st, 2020

* Valid up to the next review date of the Qualification Pack



Authorised Signatory
(Agriculture Skill Council of India)

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Organic Grower

CURRICULUM / SYLLABUS

This program is aimed at training candidates for the job of a “Organic Grower”, in the “Agriculture & Allied” Sector/Industry and aims at building the following key competencies amongst the learner

Program Name	Organic Grower		
Qualification Pack Name & Reference ID. ID	AGR/Q1201, v1.0		
Version No.	1.0	Version Update Date	
Pre-requisites to Training	5 th standard pass preferable		
Training Outcomes	<p>After completing this programme, participants will be able to:</p> <ul style="list-style-type: none"> • Produce Organic Crops: Introduction to Organic farming, Crops selection, resources, procurement of inputs, cropping pattern, schedule etc • Grow and manage crop: Crop cultivation under organic farming, inter cultural operations – organic farming • Maintain the quality of the produce (as prescribed in standards): Harvesting, Post harvesting, Quality assurance & Certification • Become well versed with Environment Health & Safety: Well versed with health and safety measures in terms of personal safety and others as well. 		

This course encompasses 10 out of 10 National Occupational Standards (NOS) of “Organic Grower” Qualification Pack issued by “Agriculture Skill Council of India”.

Sr. No.	Module	Key Learning Outcomes	Equipment Required
1	Introduction Theory Duration (hh:mm) 05:00 Practical Duration (hh:mm) 00:00 Corresponding NOS Code Bridge Module	<ul style="list-style-type: none"> • General Instructions to the Trainee • Understand the Role of a Organic Grower • Understand and study the Scopes and Opportunities of Organic Farming • Study the Need of Organic Farming in India 	Laptop, white board, marker, projector
2	Undertake planning for Organic Farming Theory Duration (hh:mm) 10:00 Practical Duration (hh:mm) 10:00 Corresponding NOS Code AGR/N1201	<ul style="list-style-type: none"> • Selection of Crop • Understand the need of safe farming practices • Understand and practice the type of safe farming practices • Transition to Organic Farming <ul style="list-style-type: none"> - Estimate the cost and time of Organic Farming - Budget estimation - Understand the phased approach to be taken to transition to organic farming • Prepare Crop portfolios – Multi crop, Feasible crop • Prepare Yearly Plan / Crop Schedule 	Laptop, white board, marker, projector, Record Keeping Book, receipts, voucher
3	Seed Selection & treatment under organic farming Theory Duration (hh:mm) 10:00 Practical Duration (hh:mm) 10:00 Corresponding NOS Code AGR/N1202	<ul style="list-style-type: none"> • Crop Selection <ul style="list-style-type: none"> - Identify main crop and companion crop - Plan for intercrop, mixed crop, relay crop, trap crop etc - Plan for crop rotation cycle - Crop schedule • Selection of seed variety – insect pest resistant, non genetically modified etc • Seed Treatment <ul style="list-style-type: none"> - understand the organic practices for seed treatment - identify inputs/material to be used for organic seed treatment - preparation of inputs for seed treatment - implementation of seed treatment 	Laptop, white board, Marker, projector, bio inputs, bio fertilizers
4	Soil nutrient management under Organic farming Theory Duration	<ul style="list-style-type: none"> • Understand the concept of soil nutrient management under organic farming • Understand the Soil Activation and Soil enhancement <ul style="list-style-type: none"> - understand importance of top soil in 	White Board, Marker, Laptop, projector, bio fertilizers, soil testing

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	(hh:mm) 05:00 Practical Duration (hh:mm) 05:00 Corresponding NOS Code AGR/N9903	<ul style="list-style-type: none"> Understand the basic safety checks and other common reported hazards before all farm operation Understand, identify and study the use of equipment, materials safely and correctly Understand and handle the emergency situation in workplace and during any farm operation 	
	Total Duration Theory Duration 80:00 Practical Duration 120:00	Unique Equipment Required: White Board, Marker, Laptop, projector, Record Keeping Book, receipts, voucher, Soil testing kit, plastic bags, labels, plough, seed drill, leveler, tractor, Sprayer, bio fertilizers, irrigation tools & equipments, container, Storage infrastructure -cool chamber, crate, bags, Nose masks, first aid kit	

Grand Total Course Duration: **200 Hours, 0 Minutes**

(This syllabus/ curriculum has been approved by [Agriculture Skill Council of India](#))

Trainer Prerequisites for Job role: “Organic Grower” mapped to Qualification Pack: “AGR/Q1201, v1.0”

Sr. No.	Area	Details
1	Description	Trainer is responsible for providing the education on cultivation of organic crops as per the organic package of practices recommended for a particular agro-climate zone, using approaches like diversity, cattle integration, on-farm input generation, biomass recycling, natural resource use optimization in exclusion of synthetic inputs directly or indirectly and sell the organic produce as per the competitive market prices without distress sale.
2	Personal Attributes	Trainer should be Subject Matter Specialist. He/ She should have good communication and observation skill, leadership skill, practical oriented skill
3	Minimum Educational Qualifications	Diploma
4a	Domain Certification	Certified for Job Role: “Organic Grower” mapped to QP: “AGR/Q1201, v1.0”. Minimum accepted score is 80%
4b	Platform Certification	Recommended that the Trainer is certified for the Job Role: “Trainer”, mapped to the Qualification Pack: “MEP/Q0102”. Minimum accepted % as per respective SSC guidelines is 80%.
5	Experience	<ul style="list-style-type: none"> • M Sc (Agriculture / Horticulture /Botany/Forestry) • B Sc. (Agriculture / Horticulture /Botany / Forestry) • Any graduate with 3 years of relevant experience • Diploma with 3 years of relevant experience • 10+2 with 5 years of relevant experience

Annexure: Assessment Criteria

Assessment Criteria	
Job Role	Organic Grower
Qualification Pack	AGR/Q1201, v1.0
Sector Skill Council	Agriculture

Sr. No.	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	Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training centre(as per assessment criteria below)
4	Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training centre based on this criteria
5	To pass the Qualification Pack, every trainee should score a minimum of 70% in aggregate
6	In case of successfully passing only certain number of NOS's, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack

Assessable Outcome	Assessment Criteria	Total Marks	Out of	Marks Allocation	
				Theory	Skills Practical
2.AGR/N1202 Seed Selection and Treatment under Organic Farming	PC1.identify suitable main crop and its companion crops depending upon the suitability of climate and season	120	15	9	6
	PC2.plan for multi-crop planting as intercrops, mixed crop, relay crop or trap crop		10	5	5
	PC3.keep rotation cycle in mind		5	2	3
	PC4.plan for sowing or planting methodology		10	5	5
	PC5.select pest and disease resistant varieties suiting to the given agro-climatic and soil situations		5	3	2
	PC6.ensure that seed or planting material is not genetically modified		5	2	3
	PC7.identify vendors for authentic organic seed procurement, if not available on-farm		5	2	3
	PC8. understand the organic practices for seed treatment		10	5	5
	PC9.identify various bio-inputs that could be used for seed treatment		5	3	2
	PC10.chalk out seed/ planting material treatment plan with: • bio inputs such as biofertilizers, bio-pesticides • on-farm made seed protecting aids such as Bijamruth • off-farm botanical or organically acceptable chemical alternatives		15	6	9
	PC11.identify vendors of authentic organic seed treatment inputs		5	3	2
	PC12.prepare bio-inputs for seed treatment in farm: Bijamruth, botanical alternatives etc		10	5	5
	PC13.implement seed treatment process appropriately		10	5	5
	PC14.understand acceptable chemical alternatives, their procurement and use		10	5	5
Total		120	60	60	

Assessable Outcome	Assessment Criteria	Total Marks	Out of	Marks Allocation	
				Theory	Skills Practical
4.AGR/N1204 Weed control under Organic Farming	PC16.prepare biodynamic inputs/compost (BD 500, BD 501, Cow Pat pit etc)	120	15	8	7
	PC17.implement various soil enhancement methods effectively: • Sanjivak, Jivamrth, Amritpani for microbial enrichment • Vermiwash, panchagavy, cattle dung urine-slurry and protein hydrolysates for growth promotion • Green manuring and biomass recycling		15	7	8
	PC18.prepare protocols for basal dose application & top dressing		15	8	7
	Total		180	90	90
	PC1.identify the types of weed in the crop		20	10	10
	PC2.maintain records of the weed and share it with experts		10	5	5
	PC3.explain clearly about the symptoms and get inputs from experts		15	7	8
	PC4.control weeds during ploughing		15	7	8
	PC5.undertake mechanical/manual weeding process at appropriate time to avoid crop damage		20	10	10
	PC6.use mulching sheets for cultivation		15	8	7
	PC7.use bio-herbicides for weed control wherever feasible		10	5	5
	PC8.use mechanized weed control equipment		15	8	7
	Total		120	60	60

Assessable Outcome	Assessment Criteria	Total Marks	Marks Allocation		
			Out of	Theory	Skills Practical
	PC15.comply to non-compliances, if any raised by the certification body		3	1	2
	PC16.ensure to follow-up for certification after the inspection		2	1	1
	PC17.release the stock for sale with Certification Mark (India Organic Logo) only after certification is granted		3	2	1
	PC18.understand procedure for risk assessment		3	2	1
	PC19.undertake parallel and split production, part conversion		2	1	1
	PC20.use machine tools averting contamination		2	1	1
	PC21.use water for irrigation averting contamination		2	1	1
	PC22.prevent contamination by water and air drift		2	1	1
	PC23.document risk management initiatives		2	1	1
	PC24.understand PGS certification system in brief		5	3	2
	PC25.adhere to the basic requirements for PGS group formation		3	1	2
	PC26.maintain documentation for group making, PGS pledge		3	2	1
	PC27.adopt PGS standards		2	1	1
	PC28.participate regularly in meetings and share vision & operational issues		2	1	1
	PC29.keep transparency and horizontality in operation		2	1	1
	PC30.understand basic documentations on field history		2	1	1
	PC31.maintain field/ farm, diary		5	2	3
	PC32.maintain internal inspection sheets and peer appraisals		2	1	1

Maintain Health and safety at the workplace	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.		5	2	3
	PC3. read and understand the hazards of use and contamination mentioned on the labels of pesticides/fumigants etc		5	2	3
	PC4. assess risks prior to performing manual handling jobs, and work according to currently recommended safe practice.		4	2	2
	PC5. use equipment and materials safely and correctly and return the same to designated storage when not in use		5	3	2
	PC6. dispose of waste safely and correctly in a designated area		4	2	2
	PC7. recognise risks to bystanders and take action to reduce risk associated with jobs in the workplace		4	2	2
	PC8. perform your work in a manner which minimizes environmental damage all procedures and work instructions for controlling risk are followed closely.		3	1	2
	PC9. report any accidents, incidents or problems without delay to an appropriate person and take necessary immediate action to reduce further danger.		3	1	2
	PC10. follow procedures for dealing with accidents, fires and emergencies, including communicating location and directions to emergency.		4	2	2
	PC11. follow emergency procedures to company standard / workplace requirements		3	1	2
	PC12. use emergency equipment in accordance with manufacturers' specifications and workplace requirements		5	3	2
	PC13. provide treatment appropriate to the patient's injuries in accordance with recognized first aid techniques		4	2	2
	PC14. recover (if practical), clean, inspect/test, refurbish, replace and store the first aid equipment as appropriate		3	2	1
	PC15. report details of first aid administered in accordance with workplace procedures.		3	2	1
		60	30	30	
	TOTAL	1200	1200	600	600

	Percentage Weightage:			50%	50%
	Minimum Pass% to qualify (aggregate):			70%	