



QUALIFICATION FILE

Sugarcane Cultivator

☒ Short Term Training (STT) ☐ Long Term Training (LTT) ☒ Apprenticeship

☒ Upskilling ☐ Dual/Flexi Qualification ☒ For ToT ☒ For ToA

☒ General ☐ Multi-skill (MS) ☐ Cross Sectoral (CS) ☐ Future Skills ☐ OEM

NCrF/NSQF Level: 3

Submitted By:

Agriculture Skill Council of India

Unit No. 101, First Floor, Greenwoods Plaza, Block 'B', Greenwoods City, Sector 45, Gurugram -122009, Haryana.

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Section 1: Basic Details

1.	Qualification Name	Sugarcane Cultivator																					
2.	Sector/s	Agriculture																					
3.	Type of Qualification: ☐ New ☒ Revised ☐ Has Electives/Options ☐ OEM	NQR Code & version of existing qualification: QG-03-AG-00280-2023-V1.1-ASCI	Qualification Name of existing/previous version: Sugarcane Cultivator																				
4.	a. OEM Name b. Qualification Name (Wherever applicable)	NA																					
5.	National Qualification Register (NQR) Code &Version (Will be issued after NSQC approval)	QG-03-AG-03905-2025-V2-ASCI & version 2.0	6. NCrf/NSQF Level: 3																				
7.	Award (Certificate/Diploma/Advance Diploma/ Any Other (Wherever applicable specify multiple entry/exits also & provide details in annexure)	Certificate																					
8.	Brief Description of the Qualification	The sugarcane cultivator undertakes the cultivation of sugarcane crop at the farm level. The individual is also responsible for harvesting and marketing the sugarcane crop. The person undertakes integrated pest and disease management, along with weed and management as part of the job role.																					
9.	Eligibility Criteria for Entry for Student/Trainee/Learner/Employee	a. Entry Qualification & Relevant Experience: b. <table border="1"> <thead> <tr> <th>S. No.</th> <th>Academic/Skill Qualification (with Specialization - if applicable)</th> <th>Required Experience (with Specialization - if applicable)</th> <th rowspan="6">Age: NA</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>10th or equivalent</td> <td></td> </tr> <tr> <td>2</td> <td>8th Class Pass</td> <td>3 Years of relevant experience in Agriculture and allied sectors</td> </tr> <tr> <td>3</td> <td>5th class pass</td> <td>6 Years of relevant experience in Agriculture and allied sectors</td> </tr> <tr> <td>4</td> <td>Previous NSQF Level 2.5</td> <td>1.5 Years of relevant experience in Agriculture and allied sectors</td> </tr> <tr> <td>5</td> <td>Previous NSQF Level 2.0</td> <td>3 Years of relevant experience in Agriculture and allied sectors</td> </tr> </tbody> </table>			S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)	Age: NA	1	10th or equivalent		2	8th Class Pass	3 Years of relevant experience in Agriculture and allied sectors	3	5 th class pass	6 Years of relevant experience in Agriculture and allied sectors	4	Previous NSQF Level 2.5	1.5 Years of relevant experience in Agriculture and allied sectors	5	Previous NSQF Level 2.0	3 Years of relevant experience in Agriculture and allied sectors
S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)	Age: NA																				
1	10th or equivalent																						
2	8th Class Pass	3 Years of relevant experience in Agriculture and allied sectors																					
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4	Previous NSQF Level 2.5	1.5 Years of relevant experience in Agriculture and allied sectors																					
5	Previous NSQF Level 2.0	3 Years of relevant experience in Agriculture and allied sectors																					
10.	Credits Assigned to this Qualification, Subject to Assessment (as per	9	11. Common Cost Norm Category (I/II/III) (wherever																				

	National Credit Framework (NCrF))		applicable): II																				
12.	Any Licensing requirements for Undertaking Training on This Qualification (wherever applicable)	NA																					
13.	Training Duration by Modes of Training Delivery (Specify Total Duration as per selected training delivery modes and as per requirement of the qualification)	☒ Offline ☐ Online ☐ Blended <table border="1"> <thead> <tr> <th>Training Delivery Modes</th><th>Theory (Hours)</th><th>Practical (Hours)</th><th>OJT Mandatory (Hours)</th><th>OJT Recommended (Hours)</th><th>Total (Hours)</th></tr> </thead> <tbody> <tr> <td>Classroom (offline)</td><td>120</td><td>150</td><td></td><td></td><td>270</td></tr> <tr> <td>Online</td><td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table> (Refer Blended Learning Annexure for details)				Training Delivery Modes	Theory (Hours)	Practical (Hours)	OJT Mandatory (Hours)	OJT Recommended (Hours)	Total (Hours)	Classroom (offline)	120	150			270	Online					
Training Delivery Modes	Theory (Hours)	Practical (Hours)	OJT Mandatory (Hours)	OJT Recommended (Hours)	Total (Hours)																		
Classroom (offline)	120	150			270																		
Online																							
14.	Aligned to NCO/ISCO Code/s (if no code is available mention the same)	NCO-2015/6111.0701																					
15.	Progression path after attaining the qualification (Please show Professional and Academic progression)	Sugarcane Cultivator(L3), Sugarcane Grower cum Miller (L4)																					
16.	Other Indian languages in which the Qualification & Model Curriculum are being submitted	Hindi																					
17.	Is similar Qualification(s) available on NQR-if yes, justification for this qualification	☐ Yes ☒ No URLs of similar Qualifications:																					
18.	Is the Job Role Amenable to Persons with Disability	☒ Yes ☐ No If "Yes", specify applicable type of Disability: <i>SHI</i>																					
19.	How Participation of Women will be Encouraged	Batches specific to women will be formed																					
20.	Are Greening/ Environment Sustainability Aspects Covered (Specify the NOS/Module which covers it)	☒ Yes ☐ No DGT/VSQ/N0101 (v1.0)																					
21.	Is Qualification Suitable to be Offered in Schools/Colleges	Schools ☒ Yes ☐ No Colleges ☒ Yes ☐ No																					
22.	Name and Contact Details of Submitting / Awarding Body SPOC (In case of CS or MS, provide details of both Lead AB & Supporting ABs)	Name: Ms Purnambica K Email: standards@asci-india.com Website: www.asci-india.com Contact No.: 0124-4670029																					
23.	Final Approval Date by NSQC: 08-05-2025	24. Validity Duration: 3 years post NSQC Approval		25. Next Review Date: 08-05-2028																			

Section 2: Module Summary

NOS/s of Qualifications

(In exceptional cases these could be described as components)

Mandatory NOS/s:

Specify the training duration and assessment criteria at NOS/ Module level. For further details refer curriculum document.

Th.-Theory **Pr.**-Practical **OJT**-On the Job **Man.**-Mandatory Training **Rec.**-Recommended **Proj.**-Project

S. No	NOS/Module Name	NOS/ Module Code & Version (if applicable)	Core/ Non- Core	NCrF/ NSQF Level	Credits as per NCrF	Training Duration (Hours)					Assessment Marks					
						Th.	Pr.	OJT- Man.	OJT- Rec.	Total	Th.	Pr.	Proj.	Viva	Total	Weightage (%) (if applicable)
1	Prepare the sugarcane cultivation site and plant the setts	AGR/N0207 (v3.0)	Core	3	1	12	18	-	-	30	30	40	-	30	100	15
2	Carry out macro and micronutrient management of field crops	AGR/N0108 (v4.0)	Core	4	1	10	20	-	-	30	30	40	-	30	100	15
3	Manage weed growth in crop fields	AGR/N0109 (v4.0)	Core	4	1	8	22	-	-	30	30	40	-	30	100	10
4	Perform integrated pest and disease management for sugarcane crop	AGR/N0208 (v3.0)	Core	3	1	10	20	-	-	30	30	40	-	30	100	15
5	Perform irrigation management for field crops	AGR/N0111 (v4.0)	Core	4	1	10	20	-	-	30	30	40	-	30	100	15
6	Carry out harvesting, ratooning and marketing of sugarcane	AGR/N0209 (v3.0)	Core	3	1	10	20	-	-	30	30	40	-	30	100	15
7	Engage in collective farming/activity	AGR/N9922 (v2.0)	Non-core	4	1	10	20	-	-	30	30	40	-	30	100	5
8	Maintain health and safety at the workplace	AGR/N9903 (v4.0)	Non-core	4	1	20	10	-	-	30	40	25	-	35	100	5
9	Employability Skills (30 Hours)	DGT/VSQ/	Non-	3	1	30	0	-	-	30	20	30	-	-	50	5

S. No	NOS/Module Name	NOS/ Module Code & Version (if applicable)	Core/ Non- Core	NCrF/ NSQF Level	Credits as per NCrF	Training Duration (Hours)					Assessment Marks					
						Th.	Pr.	OJT- Man.	OJT- Rec.	Total	Th.	Pr.	Proj.	Viva	Total	Weightage (%) (if applicable)
		N0101 (v1.0)	core													
Duration (in Hours) / Total Marks					9	120	150			270	270	335		245	850	100

Assessment - Minimum Qualifying Percentage

Please specify **any one** of the following:

Minimum Pass Percentage – Aggregate at qualification level: 50 % (Every Trainee should score specified minimum aggregate passing percentage at qualification level to successfully clear the assessment.)

Minimum Pass Percentage – NOS/Module-wise: ____% (Every Trainee should score specified minimum passing percentage in each mandatory and selected elective NOS/Module to successfully clear the assessment.)

Section 3: Training Related

1.	Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	10th Class with 7 years of relevant industry experience in Agri Crop Production* *Sugarcane Cultivator with 7 Years of experience with 10th Pass. Experience certificate issued by BDO/ Agriculture Officer/ Head of Gram Panchayat/ Loan disbursing bank or financial institution on official letter Head OR 12th Class with 4 years of relevant industry experience in Agri Crop Production** **Ex-Service-Man including Ex- Paramilitary personnel: Minimum Qualification is 10+2 with an Honourable Discharge/Pension. SSC would consider a relaxation/waiver of sector-specific experience on a case-to-case basis OR Diploma (Agriculture/ Horticulture) with 3 years of relevant industry experience in Agri Crop Production OR Graduate (any stream except Agriculture / Horticulture / Forestry) with 2 years of relevant industry experience in Agri Crop Production*** ***For the school Program minimum qualification of the Trainer should be Graduate (Agriculture / Horticulture / Botany/ Forestry) with minimum 3 years Teaching experience (will be considered industry experience).
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		OR Graduate (Agriculture/ Horticulture/ Forestry) with 0.5 year of relevant industry experience in Agri Crop Production
2.	Master Trainer's Qualification and experience in the relevant sector (in years) <i>(as per NCVET guidelines)</i>	5 years of training experience in Agri Crop Production after Graduation (any stream except Agriculture / Horticulture / Forestry) with 2 years of relevant industry experience in Agri Crop Production OR 5 years of training experience in Agri Crop Production after Graduation (Agriculture/ Horticulture/ Forestry) with 0.5 year of relevant industry experience in Agri Crop Production
3.	Tools and Equipment Required for Training	☒ Yes ☐ No <i>(If "Yes", details to be provided in Annexure)</i>
4.	In Case of Revised Qualification, Details of Any Upskilling Required for Trainer	NA

Section 4: Assessment Related

1.	Assessor's Qualification and experience in relevant sector (in years) <i>(as per NCVET guidelines)</i>	B.Sc (Agriculture/ Botany/ Agronomy and related streams) with 5 years of relevant industry experience in Agriculture crops production / Agronomy and related experience OR Post-Graduation (Agriculture/ Botany/ Agronomy and related streams) with 2 years of relevant industry experience in Agriculture crops production / Agronomy and related experience OR PhD (Agriculture/ Botany/ Agronomy and related streams) with 1 year of relevant industry experience in Agriculture crops production / Agronomy and related experience
2.	Proctor's Qualification and experience in relevant sector (in years) <i>(as per NCVET guidelines)</i>	Diploma/Graduate (It is mandatory for a proctor to have technical knowledge/IT knowledge Once a proctor has been on-boarded by any AA, they are oriented about skill ecosystem along with do's and don'ts .)
3.	Lead Assessor's/Proctor's Qualification and experience in relevant sector (in years) <i>(as per NCVET guidelines)</i>	Post-Graduation (Agriculture/ Botany/ Agronomy and related streams) with 10 years of relevant industry experience in Agriculture crops production / Agronomy and related experience
4.	Assessment Mode <i>(Specify the assessment mode)</i>	Offline
5.	Tools and Equipment Required for Assessment	☒ Same as for training ☒ Yes ☐ No <i>(details to be provided in Annexure-if it is different for Assessment)</i>

Section 5: Evidence of the need for the Qualification

Provide Annexure/Supporting documents name.

1.	Latest Skill Gap Study (not older than 2 years) (Yes/No): Yes
2.	Latest Market Research Reports or any other source (not older than 2 years) (Yes/No): No
3.	Government /Industry initiatives/ requirement (Yes/No): No
4.	Number of Industry validation provided: 14
5.	Estimated nos. of persons to be trained and employed: 2000
6.	Evidence of Concurrence/Consultation with Line Ministry/State Departments: Awaiting letter from MoA&FW

Section 6: Annexure & Supporting Documents Check List

Specify Annexure Name / Supporting document file name

1.	Annexure: NCrf/NSQF level justification based on NCrf level/NSQF descriptors <i>(Mandatory)</i>	Annexure-1
2.	Annexure: List of tools and equipment relevant for qualification <i>(Mandatory, except in case of online course)</i>	Annexure-2
3.	Annexure: Detailed Assessment Criteria <i>(Mandatory)</i>	Annexure-5
4.	Annexure: Assessment Strategy <i>(Mandatory)</i>	Annexure-6
5.	Annexure: Blended Learning <i>(Mandatory, in case selected Mode of delivery is "Blended Learning")</i>	NA
6.	Annexure: Multiple Entry-Exit Details <i>(Mandatory, in case qualification has multiple Entry-Exit)</i>	NA
7.	Annexure: Acronym and Glossary <i>(Optional)</i>	
8.	Supporting Document: Model Curriculum <i>(Mandatory – Public view)</i>	Annexure-7
9.	Supporting Document: Career Progression <i>(Mandatory - Public view)</i>	Sugarcane Cultivator(L3), Sugarcane Grower cum Miller (L4)
10.	Supporting Document: Occupational Map <i>(Mandatory)</i>	Annexure-8
11.	Supporting Document: Assessment SOP <i>(Mandatory)</i>	Annexure-9
12.	Any other document you wish to submit:	

Annexure 1: Evidence of Level

NCrf/NSQF Level Descriptors	Key requirements of the job role/ outcome of the	How the job role/ outcomes relate to the NCrf/NSQF level	NCrf/NSQF Level
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	qualification	descriptor	
Professional Theoretical Knowledge/Process	- Select and prepare the site for sugarcane cultivation - Prepare the setts for planting the setts	The sugarcane cultivator undertakes the cultivation of sugarcane crop at the farm level. The individual is also responsible for harvesting and marketing the sugarcane, elect and prepare the setts for planting. The person undertakes integrated pest and disease management, along with weed and management as part of the job role.	3
Professional and Technical Skills/ Expertise/ Professional Knowledge	- Determine the macro and micronutrients requirements - Identify weed growth - Identify and apply the necessary treatment - Administer appropriate emergency procedures - Perform waste management - Follow preventive measures to control pests and disease	The job holder is expected to have knowledge to determine the micro and macronutrients requirements of the soil based on the results of the soil test and variety of crop, select the appropriate organic and inorganic fertilisers, prepare organic fertilisers such as farmyard manure, vermicompost and inorganic fertiliser solutions, collect soil samples from the field for testing, inspect the field periodically to identify weed growth, maintain the record of observations with respect to weed identification, identify natural enemies of the pest and adopt them for pest control according to the advice of agricultural extension workers, follow procedures for dealing with accidents, fires and emergencies, report details of first aid administered in accordance, segregate waste into different categories, dispose non-recyclable waste.	3
Employment Readiness & Entrepreneurship Skills & Mind-set/Professional Skill	- Perform soil conservation - Perform weed management - Manage the water usage - Optimise resource utilisation	The job holder is expected to prepare a soil nutrition supplementation calendar based on the stages of the crop's growth, follow the recommended soil-conservation practices, select an appropriate combination of different types of intercultural and mechanical methods, spray the herbicide/ bio-herbicide safely, maintain the herbicides and herbicide application equipment separately, retain the weeds of importance during the weeding process, select and prepare the recommended herbicide/ bio-herbicide solution suitable to the crop, follow the recommended practices for effective drainage of excess water from the field, maintain the recommended level of water in the soil to prevent the harmful effects of inappropriate levels of moisture, optimise	3

		the usage of water/ electricity/ relevant materials.	
Broad Learning Outcomes/Core Skill	• Apply fertilisers to the soil • Identify pests and disease in sugarcane crops • Prepare for field irrigation • Irrigate the field	The job holder is expected to apply organic and inorganic fertilisers containing the required the recommended macro and micronutrients to the soil, apply cane ripener and/ or sugar contentincreasing chemicals, maintain the record of the fertilisers used, check the sugarcane crop and identify different types of pests, conduct regular field visits to identify plant disease vectors and major sugarcane diseases, use Integrated Pest Management (IPM) methods like light and pheromone traps to identify the presence andpopulation of insects and vectors, determine the stage of pest incidence along with the extent of damage and economic threshold levels (ETL) of the pests, collect a water sample from the source of irrigation for testing it, follow the measures recommended by the lab to improve the water quality, set up an appropriate irrigation system based on the requirement of the specific field crop, irrigate the field according to the recommended irrigation schedule for the crop, follow the recommended practices to prevent over and under-irrigation.	3
Responsibility	• Cultivation of sugarcane crop • Marketing the sugarcane crop • Integrated pest and disease management	The sugarcane cultivator undertakes the cultivation of sugarcane crop at the farm level. The individual is also responsible for harvesting and marketing the sugarcane crop. The person undertakes integrated pest and disease management, along with weed and management as part of the job role.	3

Annexure 2: Tools and Equipment (Lab Set-Up)

List of Tools and Equipment

Batch Size: 30

S. No.	Tool / Equipment Name	Specification	Quantity for specified Batch size
1	Pheromone trap	Nos	5

2	Irrigation Equipment	Nos	1
3	Video Recording Equipment	Nos	1
4	Rakes	Nos	2
5	Weeder	Nos	1
6	Cane sets	Nos	100
7	Gumboots	Nos	5
8	Land Leveller	Nos	1
9	DAP	bag	1
10	UREA	bag	1
11	Bags for storage	Nos	10
12	Sickle	Nos	2
13	Fawda/ Kudal	Nos	2
14	Knapsack sprayer	Nos	1
15	Khurpi	Nos	6
16	Rubber gloves	Nos	30
17	MOP	bag	1
18	Zinc (MICRONUTRIENTS)	Kg	2
19	Pesticide	Litres	1
20	Compost	bag	1
21	Nematicide	Kg	1
22	Face Masks	Nos	30

Classroom Aids

The aids required to conduct sessions in the classroom are:

1. Whiteboard
2. Markers

Annexure 3: Industry Validations Summary

Provide the summary information of all the industry validations in table. This is not required for OEM qualifications.

S. No	Organization Name	Representative Name	Designation	Contact Address	Contact Phone No	E-mail ID	LinkedIn Profile (if available)
1	RAJINDER AGRI CLINIC	Dr. Rajinder Singh	Managing	Amritsar,	9815008544	director@rejinderagriclinic.com	

			Director	Punjab			
2	KVK Mayurbhanj1	Dr Sanghamitra Pattnaik	Senior Scientist and Head	Shyamakhunta, Odisha	9437147934		
3	KVK Amravati	Dr. K P Singh	Senior Scientist and Head	Durgapur, Amaravati	9637717818	pckvkda2015@gmail.com	
4	KVK Kendrapara	Dr Aurobind Das	Senior Scientist and Head	Kendrapara, Odisha	8899517939	kvk.kendrapara@ouat.nic.in	
5	RRTTS(OUAT)- Koraput	Dr Srimant Kumar Sahoo	Jr. Agronomist	Semiliguda	9437960870	srin.ouat@gmail.com	
6	TRCSC	Manas Kumar Das	Secretary	Jamshedpur, JH	9939377268	trcsc_jsr@yahoo.com	
7	SUVIDHA	Santosh Pandey	Director	Haldwani	9568501053	santosh@suvidha.org.in	
8	KVK, Nuapada	Laba Soren	Senior Scientist and Head	Nuapada	9437170974	KVK, Nuapada	
9	KVK, Hingoli	Dr.P.P.Shelke	Senior Scientist and Head	Hingoli	9765390976	kvkhingoli@gmail.com	
10	KVK, Sundargarh	Dr. Jayanta Kumar Pati	Senior Scientist and Head	Rourkela	8249338822	kvksundargarh2.ouat@gmail.com	
11	KVK, Sonapur	Dr. Biswa Ranjan Pattnaik	Senior Scientist & Head	Sonapur	8249447374	kvksonapur.ouat@gmail.com	
12	KVK, Udayagiri	Dr. Sanjib Kumar Mandi	SMS	R.Udayagiri	9679309801	kvkgajapati.ouat@gmail.com	
13	KVK, Puri	Dr. Surya Narayan Mishra	Senior Scientist & Head	Sakshigopal, Puri	9668509504	kvk.puri@ouat.ac.in	
14	KVK, Dhenkanal	Dr. Bimalendu Mohanty	Senior Scientist and Head	Dhenkanal	9861118241	kvk.dhenkanal@ouat.ac.in	

Annexure 4: Training & Employment Details

Training and Employment Projections:

Year	Total Candidates		Women		People with Disability	
	Estimated Training #	Estimated Employment Opportunities	Estimated Training #	Estimated Employment Opportunities	Estimated Training #	Estimated Employment Opportunities
2024-25	500					
2025-26	500					

2026-27	1000					
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Data to be provided year-wise for next 3 years

Training, Assessment, Certification, and Placement Data for previous versions of qualifications:

Qualification Version	Year	Total Candidates				Women				People with Disability			
		Trained	Assessed	Certified	Placed	Trained	Assessed	Certified	Placed	Trained	Assessed	Certified	Placed
	2024-25												
	2023-24												
	2022-23												

Applicable for revised qualifications only, data to be provided year-wise for past 3 years.

List Schemes in which the previous version of Qualification was implemented:

1. NA

Content availability for previous versions of qualifications:

☒ Participant Handbook ☒ Facilitator Guide ☐ Digital Content ☐ Qualification Handbook ☐ Any Other:

Languages in which Content is available: Hindi and English

Annexure 5: Detailed Assessment Criteria

Detailed assessment criteria for each NOS/Module are as follows:

NOS/Module Name	Assessment Criteria for Performance Criteria/Learning Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Approved in 44 th NSQC on file approval on 01-05-2025, extended validity in 44 th NSQC	<i>Select and prepare the site for sugarcane cultivation</i> PC1. check the site has conducive climatic conditions for sugarcane cultivation and is free from limiting factors such as flooding, drought, and extreme heat and cold PC2. coordinate with an authorised lab to determine if the soil is suitable for sugarcane cultivation at the site PC3. ensure the site is accessible and has availability of quality water, labour and other inputs required for sugarcane cultivation PC4. create irrigation channels in the field, ensuring uniform levelling and grading of the field for effective drainage PC5. prepare the field for sowing setts according to the terrain, location of planting and the system to be followed such as ridges and furrows, trench, flat system, etc. PC6. apply compost, crop residue and mulch to the field in the recommended quantities PC7. check the soil's pH level using a pH meter and apply lime and gypsum in an appropriate quantity to adjust the pH level <i>Prepare the setts for planting</i> PC8. identify the appropriate variety of sugarcane for vegetative propagation depending on the time of sowing, area of cultivation, resistance to smut and red rot, drought tolerance, yield, sucrose or fibre content, etc. PC9. extract the seed material from the recent sugarcane crop, ensuring the buds are not covered with too many dry scales and are free from pests and disease PC10. arrange budded setts in the required number and prepare the setts for planting using the appropriate tools and equipment PC11. the sugarcane setts with hot air or aerated steam at the recommended temperature for the prescribed duration to eliminate mosaic virus PC12. prepare the sett treatment solution using the recommended chemicals and soak the setts in the solution for the prescribed duration <i>Plant the setts</i> PC13. ascertain the appropriate seeding rate for planting the setts as per the sugarcane varietal recommendations PC14. Plant the setts in the field appropriately and apply fertilisers in the recommended dose PC15. carry out propping of sugarcane at the recommended interval Total Marks	16 - - - - - - 8 - - - - - - - - 6 - - - 30 12 -	20 - - - - - 12 - - - - 8 - - - 8 - - - 40 10 -	- - - - - - - - - - - - - - - - - - - -	12 - - - - - 8 - - - - 10 - - - 30 8 -
AGR/N0207: Prepare the sugarcane cultivation site and plant the setts					
AGR/N0108: Carry out macro and micronutrient management of field crops	<i>Determine the macro and micronutrients requirements</i> PC1. coordinate with an authorised lab to get the soil sample tested, ensuring the sample is collected from the field, packed and labelled as per the guidelines	12 -	10 -	- -	8 -

AGR/N9903: Maintain health and safety at the workplace Approved in 43 rd NSQC Meeting dated 03 May 2025 & on file approval on 01-05-2025, extended validity in 44 th NSQC	Maintain personal hygiene	10	5	-	10
	PC1. wash hands, legs and face with soap/alcohol based sanitizer at regular intervals	-	-	-	-
	PC2. wash the worn clothes with soap and sun dry before use next time	-	-	-	-
	PC3. ensure the face is covered with mask or three layers of cloth-piece	-	-	-	-
	PC4. follow the workplace sanitization norms including distancing from sick people	-	-	-	-
	Maintain clean and safe workplace	15	15	-	15
	PC5. carry out basic safety checks before operation of all tools, implements, and machinery and report identified hazards to the supervisor	-	-	-	-
	PC6. wear appropriate Personal Protective Equipment (PPE) while performing work in accordance with the workplace policy	-	-	-	-
	PC7. follow the instructions mentioned on the labels of chemicals/pesticides/fumigants etc to avoid hazards	-	-	-	-
	PC8. assess risks prior to performing manual handling jobs, and work according to currently recommended safe practices	-	-	-	-
	PC9. sanitize equipment, tools and machinery before and after use	-	-	-	-
	PC10. use equipment and materials safely and correctly and return the same to designated storage after use	-	-	-	-
	PC11. dispose waste safely and correctly in the designated area	-	-	-	-
	PC12. recognize risks to bystanders and take required action to reduce the risks	-	-	-	-
	PC13. work in a manner which minimizes environmental damage, ensuring all procedures and instructions for controlling risks are followed	-	-	-	-
	PC14. report any accidents, incidents or problems without delay to an appropriate person and take necessary immediate action to reduce further danger	-	-	-	-
	PC15. follow government / workplace advisories incase of outbreak of any disease/disaster	-	-	-	-
	Administer appropriate emergency procedures	15	5	-	10
	PC16. follow procedures for dealing with accidents, fires and emergencies, including communicating location and directions to the location of emergency, as per the workplace requirements	-	-	-	-
	PC17. use emergency equipment in accordance with manufacturer's specifications and workplace requirements	-	-	-	-
	PC18. provide treatment appropriate to the patient's injuries in accordance with recognized first aid techniques	-	-	-	-
	PC19. recover (if practical), clean, inspect/test, refurbish, replace and store the first aid equipment as appropriate	-	-	-	-
	PC20. report details of first aid administered in accordance with workplace procedures	-	-	-	-
Sugarcane Cultivator	Total Marks	40	25	-	35

Qualification File - STT Qualification Code: OG-03-AG-03905-2025-V2-ASCI

Annexure 6:
Assessment
Strategy

This section includes the processes involved in identifying, gathering, and interpreting information to evaluate the Candidate on the required competencies of the program.

1. Assessment System Overview

In Agriculture Sector it is of ultimate importance that individuals dealing with crop production or livestock have the requisite knowledge and competencies to undertake the task. Based on the Assessment Criteria, SSC in association with empanelled AAs, define the test structure for the given job roles to cover the required skills and competencies. Assessment strategy consists of the following:

1. Multiple Choice Questions: To assess basic knowledge (Objective/Subjective)
2. Viva: To assess awareness on processes (Oral and/or written questioning)
3. Practical: To evaluate skills and identify competencies. (Observation)

Assessments for knowledge and awareness on processes may be conducted through 'real time' internet based evaluation or by conducting the same 'offline' through TABs. Skills and competencies are to be assessed by conducting 'practical' on ground through qualified and ToA certified assessors.

While it is important that an individual has adequate knowledge and skills to perform a specific task, weight age for different aspects for assessment are given as follows:

Multiple Choice Questions: 20%-30%, depending on the specific QP

Viva: 20%

Practical: 50% - 60% (Involves demonstrations of applications and presentations of procedures/tasks and other components)

Assessment will be carried out by certified assessors through empanelled assessment partners. Based on the results of assessment; ASCI will certify the learners/candidates

2. Testing Environment

Assessments are conducted on laptops, Mobiles and android tablets via both offline and online mode depending on the internet connectivity at assessment location.

In remote locations/villages, assessments get delivered through tablets without the requirement of Internet.

- Multilingual assessments (ASCI is conducting assessments in 13 + languages pan India)
- Rubric driven assessments in Practical/Viva sections and responses recorded accordingly
- All responses, data, records and feedback stored digitally on cloud
- Advanced auto-proctoring features – photographs, time-stamp, geographic-tagging, toggle-screen/copy-paste disabled, etc.
- Android based monitoring system
- End to end process from allocation of a batch to final result upload, there is no manual intervention
- Assessment will normally be fixed for a day after the end date of training / within 7 days of completion of training.
- Assessment will be conducted at the training venue
- Room where assessment is conducted will be set with proper seating arrangements with enough space to curb copying or other unethical activities
- Question bank of theory and practical will be prepared by ASCI /assessment agency and approved ASCI. Only from approved Question Bank assessment agency will prepare the question paper. Theory testing will include multiple choice questions, pictorial question, etc. which will test the trainee on his theoretical knowledge of the subject.
- The theory, practical and viva assessments will be carried out on same day. In case of more number of candidates, number of assessors and venue facilitation be increased and facilitated

Assessment			
Assessment Type	Formative or Summative	Strategies	Examples
Theory	Summative	MCQ/Written exam	Knowledge of facts related to the job role and functions. Understanding of principles and concepts related to the job role and functions
Practical	Summative	Structured tasks/Demonstration	Practical application /Demonstration /Application tasks
Viva	Summative	Questioning and Probing	Mock interviews on usability of job roles/advantages /importance of adherence to procedures. Viva will be used to gauge trainee's confidence and correct knowledge in handling job situation

The question paper pre-loaded in the computer /Tablet and it will be in the language as requested by the training partner.

3. Assessment Quality Assurance framework

Assessment Framework and Design:

Based on the Assessment Criteria, SSC in association with AAs will define the test structure for the given roles to cover the required skills and competencies. ASCI offer a bouquet of tools for multi- dimensional evaluation of candidates covering language, cognitive skills, behavioral traits and domain knowledge.

Theoretical Knowledge - Item constructs and types are determined by theoretical understanding of the testing objectives and published research about the item-types and constructs that have shown statistical validity towards measuring the construct. Test item types which have been reported to be coachable are not included. Based on these, items are developed by domain experts. They are provided with comprehensive guidelines of testing objectives of each question and other quality measures.

Type – Questions based on Knowledge Required, Case-based practical scenario questions and automated simulation based questions.

Practical Skills - The practical assessments are developed taking into consideration two aspects: what practical tasks is the candidate expected to perform on the job and what aspects of the job cannot be judged through theoretical assessments. The candidates shall be asked to perform either an entire task or a set of subtasks depending on the nature of the job role

Type – Standardized rubrics for evaluation against set of tasks in a demo/practical task

Viva Voce - Those practical tasks which cannot be performed due to time or resource constraints are evaluated through the viva mode. Practical tasks are backed up with Viva for thorough assessment and complete evaluation

Type – Procedural questions, do's and don'ts, subjective questions to check understanding of practical tasks.

Assessor has to go through orientation program organized by Assessment Agency. The training would give an overview to the assessors on the overall framework of QP evaluation. Assessor shall be given a NOS and PC level overview of each QP as applicable. Overall structure of assessment and objectivity of the marking scheme will be explained to them. The giving of marks will be driven by an objective framework which will maintain standardization of marking scheme.

4. Type of Evidence and Evidence Gathering Protocol:

During the assessment the evidences collected by AAs and ASCI are:

- Geo Tagging to track ongoing assessment
- AA's coordinator emails the list of documents and evidences (photos and videos) to the assessor one day prior to the assessment. List is mentioned below:
 - Signed Attendance sheet
 - Assessor feedback sheet
 - Candidate feedback sheet
 - Assessment checklist for assessor

- Candidate Aadhar/ID card verification
- Pictures of classroom, labs to check the availability of adequate equipment's and tool to conduct the training and assessment
- Pictures and videos of Assessment, training feedback and infrastructure.
- Apart from the Assessor, Technical assistant popularly known as Proctor also ensures the proper documentation and they verify each other's tasks.
- To validate their work on the day of assessment, regular calls and video calls are done.
- On-boarding and training of assessor and proctor is done on timely basis to ensure that quality of the assessment should be maintained.
- Training covers the understanding of QP, NSQF level, NOS and assessment structure

5. *Methods of Validation*

- Morning Check (Pre-Assessment): Backend team of AA calls and confirms assessor/technical spoc event status. Assessor/Technical spoc are instructed to reach the centre on time by 9:30 AM / as decided with TC and delay should be highlighted to the Training Partner in advance.
- Video Calls: Random video calls are made to the technical spoc/assessor so as to keep check on assessment quality and ensure assessment is carried out in fair and transparent manner
- Aadhar verification of candidates
- Evening Check (Post Assessment): Calls are made to the ground team to ensure event is over by what time and the documentation is done in proper manner or not.
- TP Calling: To keep check on malpractice activity, independent audit team calls to TP on recorded line to take confirmation if there was any malpractice activity observed in assessment on part of AA/SSC team. If calls are not connected, email is send to TP Spoc for taking their confirmation
- Video and Picture Evidence: Backend team collects video and pictures for assessment on real time basis and highlights any issue like, Students sitting idle/trainer allowed for helping out candidates during assessment.
- Surprise Visit: Time to time SSC/AA Audit team can visit the assessment location and do surprise audit for assessment process carried out by ground team.
- Geo Tagging: On day of assessment, each technical spoc is required to login in our internal app which is Geo tagged. Any deviation with centre address needs to be highlighted to assessment team on real-time basis.

Method for assessment documentation, archiving, and Access:

- ASCI has fully automated result generation process in association with multiple AAs
- Theory, Practical and Viva marks forms the basis of the results and encrypted files generated to avoid data manipulation. All responses captured and stored in System with Time-Stamps at the end of AAs and SSC. NOS-wise and PC-wise scores can be generated.
- Maker Checker concept: 1 person prepares results and other audit result which is internally approved by AA at first and then gets vetted at the end of SSC
- All soft copy of documents is received from the on-ground tech team over mail. The same are downloaded by our internal backend team and saved in Repository. The repository consists of scheme wise folders. These scheme wise folders have job role specific folders. These specific folders have Year wise and Month wise folders where all documents are saved in Batch specific folders. All Hard copies are filed and stored in storeroom.
- **Result Review & Recheck Mechanism –**

- Time stamped assessment logs
- Answer/Endorsement sheets for each candidate
- Attendance Sheet
- Feedback Forms: Assessor feedback form, Candidate feedback form, TP feedback form
- The results for each of the candidate shall be stored and available for review (retained for 5 years/ till conclusion of project or scheme)

Annexure: Acronym and Glossary

Acronym

Acronym	Description
AA	Assessment Agency
AB	Awarding Body
ISCO	International Standard Classification of Occupations
NCO	National Classification of Occupations
NCrF	National Credit Framework
NOS	National Occupational Standard(s)
NQR	National Qualification Register
NSQF	National Skills Qualifications Framework
OJT	On the Job Training

Glossary

Term	Description
National Occupational Standards (NOS)	NOS define the measurable performance outcomes required from an individual engaged in a particular task. They list down what an individual performing that task should know and also do.
Qualification	A formal outcome of an assessment and validation process which is obtained when a competent body determines that an individual has achieved learning outcomes to given standards
Qualification File	A Qualification File is a template designed to capture necessary information of a Qualification from the perspective of NSQF compliance. The Qualification File will be normally submitted by the awarding body for the qualification.
Sector	A grouping of professional activities on the basis of their main economic function, product, service or technology.
Long Term Training	Long-term skilling means any vocational training program undertaken for a year and above. https://ncvet.gov.in/sites/default/files/NCVET.pdf