



QUALIFICATION FILE

Paddy 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	Paddy Cultivator																			
2.	Sector/s	Agriculture																			
3.	Type of Qualification: <input type="checkbox"/> New <input checked="" type="checkbox"/> Revised <input type="checkbox"/> Has Electives/Options <input type="checkbox"/> OEM	NQR Code & version of existing qualification: QG-03-AG-00278-2023-V1.1-ASCI	Qualification Name of existing/previous version: Paddy Farmer																		
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-04182-2025-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 job of a paddy cultivator involves cultivation of paddy as per the package of practices recommended for a particular agronomic climate zone, type of soil, rainfall pattern and climatic conditions to achieve the yields as per the genetic potential of a given variety and sell the produce as per the competitive market prices without distress sale.																			
9.	Eligibility Criteria for Entry for Student/Trainee/Learner/Employee	<p>a. Entry Qualification & Relevant Experience:</p> <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> </tr> </thead> <tbody> <tr> <td>1</td> <td>10th or equivalent</td> <td></td> </tr> <tr> <td>2</td> <td>8th grade pass</td> <td>With 3 years of experience in Agriculture and allied sectors</td> </tr> <tr> <td>3</td> <td>5th grade pass</td> <td>With 6 years of experience in Agriculture and allied sectors</td> </tr> <tr> <td>4</td> <td>Previous NSQF level 2.5</td> <td>With 1.5 years of experience in Agriculture and allied sectors</td> </tr> <tr> <td></td> <td>Previous NSQF level 2</td> <td>With 3 years of experience in Agriculture and allied sectors</td> </tr> </tbody> </table> <p>b. Age: NA</p>		S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)	1	10th or equivalent		2	8 th grade pass	With 3 years of experience in Agriculture and allied sectors	3	5 th grade pass	With 6 years of experience in Agriculture and allied sectors	4	Previous NSQF level 2.5	With 1.5 years of experience in Agriculture and allied sectors		Previous NSQF level 2	With 3 years of experience in Agriculture and allied sectors
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	Previous NSQF level 2	With 3 years of experience in Agriculture and allied sectors																			

10.	Credits Assigned to this Qualification, Subject to Assessment (as per National Credit Framework (NCrF))	9	11. Common Cost Norm Category (I/II/III) (wherever 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)	<input checked="" type="checkbox"/> Offline <input type="checkbox"/> Online <input type="checkbox"/> 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-2015/6111.0101																						
15.	Progression path after attaining the qualification (Please show Professional and Academic progression)	Organic Grower (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	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No URLs of similar Qualifications:																						
18.	Is the Job Role Amenable to Persons with Disability	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If "Yes", specify applicable type of Disability: SHI																						
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)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No DGT/VSQ/N0101 (v1.0)																						
21.	Is Qualification Suitable to be Offered in Schools/Colleges	Schools <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Colleges <input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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/NS QF 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	Seed Preparation in Paddy	AGR/N0101 (v2.0)	Core	3	1	15	15			30	11	15		11	37	7
2	Land preparation and transplantation in Paddy	AGR/N0102 (v3.0)	Core	3	1	15	15			30	8	16		15	39	9
3	Integrated Nutrient Management in Paddy	AGR/N0103 (v3.0)	Core	3	1	10	20			30	23	30		23	76	15
4	Weed Management in Paddy	AGR/N0104 (v2.0)	Core	3	1	10	20			30	20	30		20	70	15
5	Integrated Pest and Disease Management in Paddy	AGR/N0105 (v3.0)	Core	3	1	10	20			30	30	40		30	100	20
6	Irrigation Management in Paddy	AGR/N0106 (v2.0)	Core	3	1	10	20			30	15	20		15	50	9
7	Harvesting and Post-Harvest Management in Paddy	AGR/N0107 (v2.0)	Core	3	1	10	20			30	23	30		23	76	15
8	Maintain health and safety at the workplace	AGR/N9903 (v4.0)	Non-Core	3	1	10	20			30	40	25		35	100	5
9	Employability Skills (30 Hours)	DGT/VSQ/N0101 (v1.0)	Non-Core	3	1	30				30	20	30			50	5
Duration (in Hours) / Total Marks					9	120	150			270	190	236		172	598	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)	<p>10th class with 7 years of relevant industry experience in agri crop production *Paddy Farmer/cultivation with 7 Years' 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 case to case basis. OR Diploma (Agriculture) with 3 years of relevant industry experience in agri crop production OR Graduate (any stream except Agriculture/ Horticulture) with 2 years of relevant industry experience in agri crop production*** *** For school Program minimum qualification of Trainer should be Graduate. Their Teaching experience will be considered industry experience OR Graduate (Agriculture/Horticulture) with 0.5 year of relevant industry experience in agri crop production</p>
2.	Master Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	<p>5 years of training experience after Graduation (any stream except Agriculture/ Horticulture) with 2 years of relevant industry experience in agri crop production OR</p>

		5 years of training experience after Graduation (Agriculture/Horticulture) with 1 year of relevant industry experience in agri crop production
3.	Tools and Equipment Required for Training	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (If “Yes”, details to be provided in Annexure)
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) (as per NCVET guidelines)	B.Sc (Agriculture/ Botany/ Agronomy and related streams) with 5 years of experience in Agriculture crops production / Agronomy and related experience OR M.Sc (Agriculture/ Botany/ Agronomy and related streams) with 2 years of experience in Agriculture crops production / Agronomy and related experience OR PhD in Agriculture/ Botany/Forestry/ Agronomy and related streams with 1 year of experience in Agriculture crops production / Agronomy and related experience
2.	Proctor’s Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	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) (as per NCVET guidelines)	M.Sc (Agriculture/ Botany/ Forestry/ Agronomy/ Horticulture and related streams) with 10 years of relevant experience in Agriculture crops production / Agronomy and related experience
4.	Assessment Mode (Specify the assessment mode)	Offline
5.	Tools and Equipment Required for Assessment	<input checked="" type="checkbox"/> Same as for training <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (details to be provided in Annexure-if it is different for Assessment)

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
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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: 9
5.	Estimated nos. of persons to be trained and employed: 20000
6.	Evidence of Concurrence/Consultation with Line Ministry/State Departments: Yes, Letter sent to JS on 24 Jan 2025 and reminder sent

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>	Paddy cultivator (L3), Organic Grower (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 qualification	How the job role/ outcomes relate to the NCrf/NSQF level descriptor	NCrf/NSQF Level
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Professional Theoretical Knowledge/Process	<ul style="list-style-type: none"> • Select and prepare the site for the cultivation of paddy • Procure and prepare the planting material • Sow the paddy seeds and prepare the nursery • Harvest and market the paddy produce 	The job of a paddy cultivator involves cultivation of paddy as per the package of practices recommended for a particular agronomic climate zone, type of soil, rainfall pattern and climatic conditions to achieve the yields as per the genetic potential of a given variety and sell the produce as per the competitive market prices without distress sale.	3
Professional and Technical Skills/ Expertise/ Professional Knowledge	<ul style="list-style-type: none"> • Determine the macro and micronutrients requirements • Identify weed growth • Perform soil conservation • Perform seed treatment • Follow preventive measures to control pests and disease • Manage the inventory and market the produce • Administer appropriate emergency procedures 	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 proposed to be grown variety, select the appropriate organic and inorganic fertilisers, ensuring they contain the required nutrients in recommended quantity, prepare organic fertilisers such as farmyard manure, vermicomposting and inorganic fertiliser solutions, inspect the field periodically to identify weed growth, maintain the record of observations with respect to weed identification and their growth, carry out crop rotation with suitable crops, follow the recommended practices to restrict the entry of pathogens into the field through planting material, irrigation water, workers, tools and equipment, and vectors, identify and remove the diseased crop to prevent the spread of pest and disease, recommended combination of biological, mechanical and chemical control methods for effective pest and disease prevention, identify the appropriate market and buyers of cereals, calculate the benefit-cost (B:C) ratio, follow procedures for dealing with accidents, fires and emergencies, use emergency equipment in accordance with the manufacturer's specifications and workplace requirements, report details of first aid administered in accordance with workplace procedures.	3
Employment Readiness & Entrepreneurship Skills & Mind-set/Professional Skill	<ul style="list-style-type: none"> • Perform transplantation of paddy seedlings • Perform weed management • Identify and apply the necessary treatment • Manage the water usage • Maintain the paddy crop 	The job holder is expected to select an appropriate combination of different types of intercropping and mechanical methods for effective weed control, retain the weeds of importance during the weeding process, select	3

	<p>Harvest the paddy crop • Maintain a clean and safe workplace • Raise paddy seedlings in the nursery • Maintain personal hygiene</p>	<p>and prepare the recommended herbicide/ bio-herbicide solution suitable to the crop, maintain the herbicides and herbicide application equipment separately to prevent cross-contamination with other chemicals, identify natural enemies of the paddy pests and adopt them for pest control according to the advice of agricultural extension officer, follow the recommended safety practices while applying any treatment, maintain the record of the use of any pesticides, insecticides and any other treatment, 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 in it, check the maturity of the paddy crop to ensure its readiness, arrange the necessary tools, equipment and machinery for harvesting paddy crop, harvest the crop, ensuring minimum loss, carry out basic safety checks before operation of all tools, implements, and machinery and report identified hazards, follow the instructions mentioned on the labels of chemicals/pesticides/fumigants etc. assess risks prior to performing manual handling jobs, and work according to currently recommended safe practices, work in a manner that minimises environmental damage, follow government/workplace advisories in case of outbreak of any disease/disaster, apply pre-emergent and post-emergent herbicides to the crop, as required, apply the recommended fertilisers in the recommended dose during various stages of the crop's growth, identify signs of pest and diseases infestation in the Paddy crop and apply the recommended treatment, ensure the availability of quality water in the required quantity and create irrigation channels to supply water in the nursery, perform weed control in the nursery beds, apply pesticides and fungicides as per the requirement in the nursery to protect the seedlings, uproot the seedlings at the recommended stage</p>	
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		for transplantation in the rice field, insect and disease protection chemicals before sowing, select an appropriate time with the required temperature and moisture levels in the soil, select an appropriate variety or hybrid of millet for cultivation, apply the recommended fertilisers to the field in the prescribed dose, treat the millet seeds with the appropriate insect and disease protection chemicals before sowing, select an appropriate time with the required temperature and moisture levels in the soil.	
Broad Learning Outcomes/Core Skill	<ul style="list-style-type: none"> • Procure and prepare the planting material • Apply fertilisers to the soil • Perform soil conservation 	The job holder is expected to select the appropriate varieties of Paddy such as hybrids to be cultivated based on the climate, procure quality seeds of proposed paddy variety from authorised sources, treat the seeds with the recommended pesticides and fungicides, store the treated seeds at the recommended temperature and humidity, apply organic and inorganic fertilisers containing the required the recommended macro and micronutrients to the soil, maintain the record of the fertilisers used in the farm, prepare a soil nutrition supplementation calendar based on the stages of the crop's growth, follow the recommended soil-conservation practices, follow the recommended Integrated Pest Management (IPM) methods to identify the presence and population of pests, insects and vectors, determine the stage of pest and disease incidence along with the extent of damage and economic threshold levels (ETL) of the pests, to determine the causal organism for the disease and its treatment, collect a water sample from the source of irrigation and coordinate with an authorised lab to get it tested, 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, check the harvested Paddy for biological infestation and physical damage, segregate the infested and damaged paddy grains,	3

		carry out threshing or winnowing of the harvested paddy crop to loosen the grain seed from the husk, follow the recommended practices to prevent damage and contamination of the Paddy crop, apply the necessary treatment in the storage to remove pests and rodents, check the maturity of the paddy crop based on the growth, moisture content, carry out ploughing, harrowing and levelling in the rice field, apply recommended fertilisers to the field as per the basal dose fertiliser application technique, transplant the rice seedlings in the field, maintaining the recommended spacing between the rows for intercultural operations, follow the practices recommended as per the System of Rice Intensification (SRI) for an improved yield, identify the maturity of the rice crop based on its growth and change in colour, select the appropriate harvesting method, improve the soil fertility according to the recommended stubble management methods,	
Responsibility	<ul style="list-style-type: none"> • Cultivation of paddy crop • Preparing the farm, procuring, treating and sowing • Maintaining & harvesting the crop 	A Paddy Cultivator cultivates varieties of Paddy as per the package of practices recommended for a particular paddy variety and agro climate zone to achieve yields as per the genetic potential. The individual is also responsible for harvesting and marketing the produce	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	Video Recording Equipment	Nos	1
2	DAP	bag	1
3	Biofertilizers	Kg	1
4	Paddy Seeds	Kg	2

5	seedling tray-Paddy Transplanter	Nos	5
6	Seed Treatment Agent	ml	250
7	Bags for storage	Nos	10
8	UREA	bag	1
9	Puddler	Nos	1
10	Paddy Seedlings	Nos	10
11	Ploughing Equipment	Nos	1
12	Soil Testing Kit	Nos	1
13	Zinc (MICRONUTRIENTS)	Kg	2
14	Herbicide	litre	1
15	Pesticide	litre	1
16	Rubber gloves	Nos	30
17	Compost	Kg	10
18	Fawda/ Kudal	Nos	2
19	Khurpi	Nos	6
20	Sickle	Nos	3
21	Nematicide	Kg	1
22	Knapsack sprayer	Nos	1
23	MOP	bag	1
24	Plastic tub for harvesting	Nos	1
25	Paddy Harvesting Tool	Nos	1
26	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)
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1	SPWD	Sanjay Kumar	Sr.Programme Officer	Ranchi	9955166278	sanjayspwdranchi@gmail.com	
2	SUVIDHA	Santosh Pandey	Director	Haldwani	9568501053	santosh@suvidha.org.in	
3	KVK, Nuapada	Laba Soren	Senior Scientist and Head	Nuapada	9437170974	KVK, Nuapada	
4	KVK, Sundargarh	Dr. Jayanta Kumar Pati	Senior Scientist and Head	Rourkela	8249338822	kvksundargarh2.ouat@gmail.com	
5	KVK Mayurbhanj-II	Dr. Deepak Kumar Mohanty	Senior Scientist and Head	Jashipur	7978953120	kvkmayurbhanj2.ouat@gmail.com	
6	RAJINDER AGRI CLINIC	Dr. Rajinder Singh	MD	AMRITSAR, PUNJAB	9815008544	director@rejinderagriclinic.com	
7	KVK, Sonapur	Dr. Biswa Ranjan Pattnaik	Senior Scientist & Head	Sonapur	8249447374	kvksonapur.ouat@gmail.com	
8	KVK, Puri	Dr. Surya Narayan Mishra	Senior Scientist & Head	Sakshigopal, Puri	9668509504	kvk.puri@ouat.ac.in	
9	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
2025-26	5000	10	10	0	10	0
2026-27	5000	10	10	0	10	0
2027-28	10,000	10	10	0	10	0

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
v2	2024-25	19471	19471	19471	19471	0	0	0	0	0	0	0	0
v2	2023-24												
v2	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.

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:

AGR/N0101: Seed Preparation in Paddy				
Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Appropriate Seed Variety	2	3	-	2
PC1. select varieties based on area / ecosystem / season, yield and resistance to pests and diseases	-	-	-	-
Procurement of Seed	2	2	-	2
PC2. identify various vendors / suppliers (including government nurseries / department) of the seed that are certified	-	-	-	-
PC3. ascertain the quality of seed material from each source in terms of free from pests and diseases, germination percentage etc.	-	-	-	-
PC4. ascertain the prevailing market rates for the seed material	-	-	-	-
PC5. procure the seed material	-	-	-	-

PC6. identify an appropriate storage space (free of infestation and having congenial climatic conditions for the seed)	-	-	-	-
PC7. store the seed (if there is time lag between procurement and sowing / nursery preparation) as per recommended place and procedure	-	-	-	-
Seed Treatment	2	3	-	2
PC8. ascertain the prevalent pests and diseases of paddy in a given agro-climatic zone	-	-	-	-
PC9. ascertain the appropriate pesticides (chemical as well as biological) available for seed treatment	-	-	-	-
PC10. treat the seed as per the dosage recommended by the state agriculture university / department or as prescribed by the pesticide manufacturer	-	-	-	-
Health and Safety Precautions	1	2	-	1
PC11. read the safety precautions in the reading material provided with the pesticide	-	-	-	-
PC12. keep ready with all the necessary first aids	-	-	-	-

as suggested in the safety measures				
PC13. use all the necessary safety material and follow all the preventive measures to avoid any injury during use / application of pesticide	-	-	-	-
Nursery Preparation	4	5	-	4
PC14. thoroughly plough soil	-	-	-	-
PC15. prepare nursery beds as per availability of resources	-	-	-	-
PC16. make irrigation and drainage channels	-	-	-	-
PC17. broadcast the sprouted seed as per the recommended seed rate	-	-	-	-
PC18. apply manures	-	-	-	-
PC19. take up weed control	-	-	-	-
PC20. net the nursery bed	-	-	-	-
PC21. control pests and diseases	-	-	-	-
PC22. uproot the seedlings for transplantation at the recommended stage for a given variety and soil	-	-	-	-

PC23. in case of use of paddy transplanter (mechanisation), grow seedlings in trays as per recommended procedure	-	-	-	-
NOS Total	11	15	-	11
AGR/N0102: Land preparation and transplantation in Paddy				
Land Preparation, Ploughing and Puddling	3	5	-	5
PC1. clean and plough the field	-	-	-	-
PC2. submerge the main field with water	-	-	-	-
PC3. puddle and level the field	-	-	-	-
PC4. take up irrigation and drainage channels	-	-	-	-
PC5. preparation of bunds	-	-	-	-
PC6. compact the bunds	-	-	-	-
PC7. take up all other advanced practices that would support various methods of cultivation such as system of rice intensification (sri).	-	-	-	-
Transplantation	2	5	-	5
PC8. take up seed dipping of paddy seedlings for plant protection, as per recommended	-	-	-	-

procedures				
PC9. maintain inter-row distance to be decided as per the requirement of inter-cultivation operations, in case use of paddy transplanter	-	-	-	-
PC10. transplanting practices as per recommended procedures including methods such as sri.	-	-	-	-
<i>Land preparation and management in Direct Seeded Rice (DSR) method</i>	3	6		5
PC11. prepare the land using laser leveling or manual methods to ensure a flat field	-	-	-	-
PC12. prepare the soil with minimal tillage in dry fields or puddling in wet fields, depending on the DSR type (dry or wet).	-	-	-	-
PC13. apply pre-sowing herbicides like glyphosate to clear existing weeds	-	-	-	-
PC14. use certified, high-yield, and short-duration rice varieties suitable for DSR	-	-	-	-
PC15. treat seeds with fungicides and bio inoculants to prevent seed-borne diseases and promote healthy germination	-	-	-	-

PC16. Sow seeds at appropriate time and as per the recommended seed rate for the selected variety using appropriate sowing method	-	-	-	-
PC17. Wet the field lightly before sowing in dry DSR; for wet DSR, maintain a shallow water level until germination	-	-	-	-
PC18. Keep the soil moist but avoid water logging during early growth stages.	-	-	-	-
PC19. Use Alternate Wetting and Drying (AWD) to save water while maintaining yields	-	-	-	-
NOS Total	8	16	-	15
AGR/N0103: Integrated Nutrient Management in Paddy				
Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Soil Sampling	3	4	-	3
PC1. Take soil as per the recommended sampling procedure from the field	-	-	-	-
PC2. Dry the soil and prepare samples as per procedure	-	-	-	-
Testing For Macro and Micro Nutrient Analysis	3	4	-	6

PC3. pack, label and submit to nearby soil testing laboratory for analysis	-	-	-	-
PC4. collect the soil analysis report from the lab	-	-	-	-
PC5. collect the recommended organic and inorganic fertilizer dosage from agriculture department based on the soil analysis report	-	-	-	-
Application of Organic and Inorganic Fertilizers	14	18	-	10
PC6. select appropriately decomposed farm yard manure for soil application	-	-	-	-
PC7. apply the fym to the soil as per recommended dosage and procedure before planting and during crop cultivation (if required)	-	-	-	-
PC8. adopt various cultural practices that enhances the soil nutrient status for the benefit of crop stand	-	-	-	-
PC9. prepare the mixture of fertilizers for application in the field, using them in the recommended quantity				
PC10. apply of organic and inorganic fertilisers for macro and micro nutrients as per the	-	-	-	-

recommended dosage, timing and method of application				
PC11. regulate the dose of manure and fertiliser according to the crop cycle				
Perform soil conservation	3	4		4
PC12. prepare a soil nutrition supplementation calendar based on the stages of the crop's growth				
PC13. follow the recommended practices for soil conservation, such as crop rotation, mulching, etc to conserve soil moisture and application of organic manure				
PC14. implement practices that minimize environmental impact, such as minimizing pesticide use, conserving water, and preventing soil erosion				
NOS Total	23	30	-	23
AGR/N0104: Weed Management in Paddy				
Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Weed Management	20	30	-	20

PC1. incorporate the weeds and stubbles during summer ploughing and puddling	-	-	-	-
PC2. manual weeding / chemical weedicide application at appropriate stages of crop growth	-	-	-	-
PC3. use of bio herbicides for weed control wherever feasible	-	-	-	-
PC4. maintain field bunds clean to avoid proliferation of weed seeds	-	-	-	-
NOS Total	20	30	-	20
AGR/N0105: Integrated Pest and Disease Management in Paddy				
Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Identification Of Pests and Understanding Behavior</i>	10	15	-	10
PC1. identifying types of pests (stem borers, gall midge, hoppers, hispa and gundhibug etc) in paddy crop	-	-	-	-
PC2. identify stage of crop and pest incidence and prepare pest calendar	-	-	-	-
PC3. diagnosis: signs and symptoms of damage (-	-	-	-

dead hearts, burns, feeding marks)				
PC4. identify the pest life cycle duration	-	-	-	-
PC5. identify behavior of the pest (like diurnal or nocturnal, egg laying behavior, attraction to colours etc)	-	-	-	-
PC6. identify natural enemies of the pests(naids/dragon flflies, trichogramma, mirid bug, lady bird beetles, spiders, preying mantids etc)	-	-	-	-
Preventive And Curative Methods	20	25	-	20
PC7. identify types of diseases associated (blast, bacterial leaf blight, sheath rot, sheath blight, tungro) in the crop	-	-	-	-
PC8. identify crop stage and disease incidence disease calendar	-	-	-	-
PC9. identify signs and symptoms of different diseases (leaf spots, discoloured areas, leaf margins drying, stunted growth)	-	-	-	-
PC10. identify mode of transmission (implements, vectors, water, rain, wind)	-	-	-	-

PC11. stubble clearing to drive away the diapausing larvae	-	-	-	-
PC12. use of resistant varieties	-	-	-	-
PC13. seed and seedling treatment	-	-	-	-
PC14. take up planting modification (like system of rice intensification sri or dry sowing)	-	-	-	-
PC15. using various traps (light, pheromone etc)	-	-	-	-
PC16. erecting bird perches	-	-	-	-
PC17. various sprays a. chemical approaches: as recommended by state agricultural universityb.non-chemical approaches:neem seed kernel extract, cow dung and urine spray, panchagavya spray, 5 leaf extract, 10 leaves extract, sour butter milk extract. etc based on pest type	-	-	-	-
NOS Total	30	40	-	30
AGR/N0106: Irrigation Management in Paddy				
Irrigation Management	15	20	-	15

PC1. during the standing crop period, moisture stress may be avoided through regular water supply as per recommended procedure	-	-	-	-
PC2. water drainage may be ensured at appropriate status during / prior to certain crop stages such as fertilizer application, flowering, harvesting etc.,	-	-	-	-
PC3. avoid water loss through seepage and leaching	-	-	-	-
NOS Total	15	20	-	15
AGR/N0107: Harvesting and Post-Harvest Management in Paddy				
Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Harvesting	12	16	-	12
PC1. harvest the crop at the appropriate stage	-	-	-	-
PC2. dry the harvested produce to remove moisture	-	-	-	-
PC3. threshing and winnowing	-	-	-	-

Storage and Post -harvest management	11	14	-	11
PC4. maintenance of ideal storage conditions	-	-	-	-
PC5. manage storage pests	-	-	-	-
NOS Total	23	30	-	23
AGR/N9903: Maintain health and safety at the workplace				
Maintain personal hygiene	10	5	-	10
PC1. wash hands, legs and face with soap/alcohol based sanitizer at reasonable 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	-	-	-	-
<i>Administer appropriate emergency procedures</i>	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		-	-	-	-
NOS Total		40	25	-	35
DGT/VSQ/N0101: Employability Skills (30 Hours)					
	Introduction to Employability Skills	1	1	-	-
PC1.	understand the significance of employability skills in meeting the job requirements	-	-	-	-
	Constitutional values – Citizenship	1	1	-	-
PC2.	identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices	-	-	-	-
	Becoming a Professional in the 21st Century	1	3	-	-
PC3.	explain 21st Century Skills such as Self Awareness, Behavior Skills, Positive attitude, self-motivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset etc.	-	-	-	-

	Basic English Skills	2	3	-	-
PC4.	Speak with others using some basic English phrases or sentences	-	-	-	-
	Communication Skills	1	1	-	-
PC5.	Follow good manners while communicating with others	-	-	-	-
PC6.	Work with others in a team	-	-	-	-
	Diversity & Inclusion	1	1	-	-
PC7.	Communicate and behave appropriately with all genders and PwD	-	-	-	-
PC8.	Report any issues related to sexual harassment	-	-	-	-
	Financial and Legal Literacy	3	4	-	-
PC9.	Use various financial products and services safely and securely	-	-	-	-
PC10.	Calculate income, expenses, savings etc.	-	-	-	-
PC11.	Approach the concerned authorities for any exploitation as per legal rights and laws	-	-	-	-
	Essential Digital Skills	4	6	-	-

PC12.	operate digital devices and use its features and applications securely and safely	-	-	-	-
PC13.	use internet and social media platforms securely and safely	-	-	-	-
	Entrepreneurship	3	5	-	-
PC14.	identify and assess opportunities for potential business	-	-	-	-
PC15.	identify sources for arranging money and associated financial and legal challenges	-	-	-	-
	Customer Service	2	2	-	-
PC16.	identify different types of customers	-	-	-	-
PC17.	identify customer needs and address them appropriately	-	-	-	-
PC18.	follow appropriate hygiene and grooming standards	-	-	-	-
	Getting ready for apprenticeship & Jobs	1	3	-	-
PC19.	create a basic biodata	-	-	-	-
PC20.	search for suitable jobs and apply	-	-	-	-
PC21.	identify and register apprenticeship	-	-	-	-

	opportunities as per requirement				
	NOS Total	20	30	-	-



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-Stamped 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