



QUALIFICATION FILE

Fishing Boat Driver (Small Mechanized vessel)

☒ 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: 4

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	Fishing Boat Driver (Small Mechanized vessel)	
2.	Sector/s	Agriculture	
3.	Type of Qualification: ☐ New ☒ Revised ☐ Has Electives/Options ☐ OEM	NQR Code & version of existing qualification: QG-04-AG-00292-2023-V1.1-ASCI	Qualification Name of existing/previous version: Fishing Boat Driver (Small Mechanized vessels upto 24 OAL)
4.	a. OEM Name b. Qualification Name (Wherever applicable)	NA	
5.	National Qualification Register (NQR) Code &Version (Will be issued after NSQC approval)	QG-04-AG-03919-2025-V2-ASCI & version 2.0	6. NCrf/NSQF Level: 4
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	A Fishing Boat Driver (Small Mechanized Vessel) is responsible for steering the small mechanised boat in the sea. The individual follows the planned route to navigate between the harbour and identified fishing location. The person also prepares the boat for fishing operation and carries out its minor repair and maintenance.	

9.	Eligibility Criteria for Entry for Student/Trainee/Learner/Employee	a. Entry Qualification & Relevant Experience: b. <table border="1" data-bbox="1025 180 2027 619"> <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>12th grade pass or equivalent</td><td></td></tr> <tr> <td>2</td><td>10 Grade pass</td><td>3 years of relevant experience in Agriculture and allied sectors</td></tr> <tr> <td>3</td><td>8 Grade pass</td><td>6 years of relevant experience in Agriculture and allied sectors</td></tr> <tr> <td>4</td><td>Previous NSQF level 3.5</td><td>1.5 years of relevant experience in Agriculture and allied sectors</td></tr> <tr> <td>5</td><td>Previous NSQF level 3</td><td>3 years of relevant experience in Agriculture and allied sectors</td></tr> </tbody> </table> Age: 18 years						S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)	1	12th grade pass or equivalent		2	10 Grade pass	3 years of relevant experience in Agriculture and allied sectors	3	8 Grade pass	6 years of relevant experience in Agriculture and allied sectors	4	Previous NSQF level 3.5	1.5 years of relevant experience in Agriculture and allied sectors	5	Previous NSQF level 3	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)																							
1	12th grade pass or equivalent																								
2	10 Grade pass	3 years of relevant experience in Agriculture and allied sectors																							
3	8 Grade pass	6 years of relevant experience in Agriculture and allied sectors																							
4	Previous NSQF level 3.5	1.5 years of relevant experience in Agriculture and allied sectors																							
5	Previous NSQF level 3	3 years of relevant experience in Agriculture and allied sectors																							
10.	Credits Assigned to this Qualification, Subject to Assessment (as per National Credit Framework (NCrF))	13	11. Common Cost Norm Category (I/II/III) (wherever applicable): I																						
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" data-bbox="940 813 2038 986"> <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>120</td><td></td><td>390</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	120		390	Online						
Training Delivery Modes	Theory (Hours)	Practical (Hours)	OJT Mandatory (Hours)	OJT Recommended (Hours)	Total (Hours)																				
Classroom (offline)	120	150	120		390																				
Online																									
14.	Aligned to NCO/ISCO Code/s (if no code is available mention the same)	NCO-2015/6222																							
15.	Progression path after attaining the qualification (Please show Professional and Academic progression)	Fishing Boat Driver (Small Mechanized vessels) (L4), Marine fishing cadet (L5)																							
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: SHI																							

19.	How Participation of Women will be Encouraged	Batches specific to women will be formed	
20.	Are Greening/ Environment Sustainability Aspects Covered (<i>Specify the NOS/Module which covers it</i>)	☒ Yes ☐ No DGT/VSQ/N0102 (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 <i>(In case of CS or MS, provide details of both Lead AB & Supporting ABs)</i>	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: 6 months' post NSQC Approval	25. Next Review Date:

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 for the fishing operation	AGR/N5004 (v4.0)	Core	4	3	30	60			90	30	40		30	100	40
2	Steer the boat during the fishing operation	AGR/N5005 (v4.0)	Core	4	3	15	75			90	30	40		30	100	50
3	Follow the safety and hygiene practices in capture fisheries operations	AGR/N5103 (v3.0)	Non-core	4	1	15	15			30	30	40		30	100	5
4	Employability Skills (60 Hours)	DGT/VSQ/ N0102 (v1.0)	Non-core	4	2	60				60	20	30		-	50	5
5	OJT (Mandatory)				4			120		120						
Duration (in Hours) / Total Marks					13	120	150	120		390	110	150		90	350	100

Assessment - Minimum Qualifying Percentage

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

Minimum Pass Percentage – Aggregate at qualification level: 70 % (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 5 years of relevant industry experience in Maintenance and upkeep of the fishing boat OR Diploma (Fisheries) with 3 years of relevant industry experience in Maintenance and upkeep of the fishing boat* *Regular Diploma of more than 15 months in fisheries OR Graduate (Agriculture/ Fisheries/ Zoology) with 2 years of relevant industry experience in Maintenance and upkeep of the fishing boat** ** For the school Program minimum qualification of the Trainer should be Graduate (Fisheries Science/Industrial Fish & Fisheries / Zoology). With minimum 2 years teaching experience (will be considered industry experience) OR B.Tech (Fisheries) with 1 year of relevant industry experience in Maintenance and upkeep of the fishing boat OR M.Tech (Fisheries)
2.	Master Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	5 years of training experience after Graduation in (Agriculture/ Fisheries/ Zoology) with 2 years of relevant industry experience in Maintenance and upkeep of the fishing boat OR 5 years of training experience after B.Tech (Fisheries) with 1 year of relevant industry experience in Maintenance and upkeep of the fishing boat OR 5 years of training experience after M.Tech (Fisheries)
3.	Tools and Equipment Required for Training	☒ Yes ☐ 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

	Assessor's Qualification and experience in relevant sector (in years) <i>(as per NCVET guidelines)</i>	B. Fsc with 4 years of industry experience in Fisheries Science/ Zoology/ Aquaculture/Applied aquaculture/Marine Biology or related experience OR B. Tech (Fisheries Engineering and related streams with 4 years of industry experience in In Fisheries Science/ Zoology/ Aquaculture/Applied aquaculture/Marine Biology or related experience OR B. Sc (Fisheries and related streams) with 5 years of industry experience in Fisheries Science/ Zoology/ Aquaculture/Applied aquaculture/Marine Biology or related experience OR M.Tech (Aqua cultural engineering/Fisheries engineering and related streams) with 2 years of industry experience in Fisheries Science/ Zoology/ Aquaculture/Applied aquaculture/Marine Biology or related streams OR M. F. Sc with 2 years of industry experience in Fisheries Science/ Zoology/ Aquaculture/Applied aquaculture/Marine Biology or related streams OR M. Sc (Fisheries and related streams) with 2 years of industry experience in Fisheries Science/ Zoology/ Aquaculture/Applied aquaculture/Marine Biology or related experience OR PhD (Fisheries Science and related streams) with 1 year of industry experience in Fisheries Science/ Zoology/ Aquaculture/Applied aquaculture/Marine Biology or related experience
	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.)
	Lead Assessor's/Proctor's Qualification and experience in relevant sector (in years) <i>(as per NCVET guidelines)</i>	M.Tech (Aqua cultural engineering/Fisheries engineering and related streams) with 10 years of industry experience in Fisheries Science/ Zoology/ Aquaculture/Applied aquaculture/Marine Biology or related streams OR M. F. Sc with 10 years of industry experience in Fisheries Science/ Zoology/ Aquaculture/Applied aquaculture/Marine Biology or related streams OR M. Sc (Fisheries and related streams) with 10 years of industry experience in Fisheries Science/ Zoology/ Aquaculture/Applied aquaculture/Marine Biology or related experience

	Assessment Mode <i>(Specify the assessment mode)</i>	Offline
	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: 10
5.	Estimated nos. of persons to be trained and employed: 2000
6.	Evidence of Concurrence/Consultation with Line Ministry/State Departments: DOF, Ministry of Fisheries, Animal Husbandry and Dairying

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 (Mandatory - Public view)	<i>Fishing Boat Driver (Small Mechanized vessels) (L4), Marine fishing cadet (L5)</i>
10.	Supporting Document: Occupational Map (Mandatory)	<i>Annexure-8</i>
11.	Supporting Document: Assessment SOP (Mandatory)	<i>Annexure-9</i>
12.	Any other document you wish to submit:	

Annexure 1: Evidence of Level

NSQF Domain	NSQF Domain	NSQF Domain	NCrF/NSQF Level
Process	- Steering of mechanised boat - Navigating the route - Carry pot repair and maintenance	A Fishing Boat Driver (Small Mechanized Vessel) is responsible for steering the small mechanised boat in the sea. The individual follows the planned route to navigate between the harbour and identified fishing location. The person also prepares the boat for fishing operation and carries out its minor repair and maintenance.	4
Professional knowledge	- Follow the safety protocols while navigating, anchoring and harbouring - Follow the onboard safe working practices	The job holder is expected to have knowledge of seamanship and rope work, coastal navigation rules with respect to fishing vessels and international border line (IBL), steering and manoeuvring in the following conditions during day and night: arrival and departure from fishing harbors, while cruising in the open waters, while anchoring, basic operating skills of the following equipment: GPS, VHF radio, fish finder (echo sounder), other equipment electronic equipment's, how to communicate distress during emergency by vhf radio, what signals to be displayed while in distress or emergency, how to use safety equipment, like donning of a life jacket	4
Professional skill	- Optimise resource utilisation - Perform waste management - plan and schedule tasks for efficient use of time	The job holder is expected to optimise the usage of materials involved in the task, ensure safe working with electrical tools and equipment, follow the recommended inclusive practices at the work, check for the weather forecast and their	4

	- the importance of checking weather forecasts and sea conditions before going into the sea - Practice inclusion at work	reliability, and to identify potential dangers early enough and avert emergencies, decide when to turn back during rough weather, plan to reach a fishing ground and return home using the shortest and safest route, maintain good relationships with staff, send distress messages through all available means in adverse situations.	
Core Skills	- Check the safety and fire-fighting equipment - Follow the safety guidelines in water bodies - mandatory signals to display on the fishing boat as per the coastal navigation rules - Follow the hygiene standards while handling fish	The job holder is expected to check for the safety equipment such as life jackets and safety lanyard, testing the fire extinguishers, test the fire hoses, follow CRZ regulations, relevant equipment to detect ships, take appropriate measures to avoid collisions, detect underwater dangers, measures to mitigate them, the job holder should take the shortest and most economic route to the fishing location using GPS, use the relevant equipment to detect the presence of other boats, vessels and dredgers, proper use navigation guidelines, The job holder is expected to follow the applicable laws related to fishing methods, use of different types of fishing gear, conservation of banned species, handling and cleaning of the caught fish, recommended temperature for storing and in hygienic conditions to maintain its freshness	4
Responsibility	- Steering the small mechanised boat - Navigation between harbour and identified fishing location - Preparation of boat for fishing operation - Repair and maintenance of boat (minor)	A Fishing Boat Driver (Small Mechanized Vessel is responsible for steering the small mechanised boat in the sea. The individual follows the planned route to navigate between the harbour and identified fishing location. The person also prepares the boat for fishing operation and carries out its minor repair and maintenance.	4

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	Fishing Boat	Nos	1
2	Fishing boat models	Nos	1
3	Navigation lights	Nos	1
4	Torch	Nos	1
5	Marine magnetic compass	Nos	1
6	Ropes	Nos	1
7	Electronic and communication devices	Nos	1
8	Hand gloves	Nos	30
9	Head gear	Nos	1
10	Video Recording Equipment	Nos	1
11	Boots	Nos	6
12	Anchor	Nos	1

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	ELIM CHEM PRIVATE LTD	Dr. Narasimha Murty Kinjarapu	GM- Technical & Product Development Manager	East Godavari	9885867640	narasimhaau@gmail.com	
2	Reclamation Fish and Crops Private Limited	Indumati Nanda	Director	Bhubaneswar	6371694908	info.reclamationfc@gmail.com	
3	Kailash Fisheries and Aquatics	Akshya Kumar Sahu	Proprietor	Mayurbhanha	9437147897	akshyakumarsahu1977@gmail.com	
4	Aum Academia Private Limited	Damodar Satapathy	Director	Bhubaneswar	9861077340	dsp1959satapathy@gmail.com	
5	KVK, Changlang	Dr. Devendra Singh Chhonkar	Senior Scientist & Head	Jairampur	8119976400	kvkchanglang@gmail.com	
6	KVK, Sundargarh-II	Dr. Jayanta Kumar Pati	Senior Scientist & Head	Rourkela	8249338822	kvksundargarh2.ouat@gmail.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 & Head	Dhenkanal	9861118241	Kvk.dhenkanal@ouat.ac.in	
10	SP Agrico India Private Limited	Susanta Kumar	Managing	Bhubaneswar	7008663158	sushan_pradhan58@rediffmail.com	

		Pradhan	Director				
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Annexure 4: Training & Employment Details

Training and Employment Projections:

Year	Total Candidates		Women		People with Disability	
	Estimated Training PC.	Estimated Employment Opportunities	Estimated Training PC.	Estimated Employment Opportunities	Estimated Training PC.	Estimated Employment Opportunities
2025-26	500					
2026-27	500					
2027-28	1000					

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
	2022-23												
	2023-24												
	2024-25												

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.
2.

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
AGR/N5004: Prepare for the fishing operation	<i>Check various equipment and accessories</i>	14	18		14
	PC1. Use various equipment such as the GPS receiver, echo sounder, marine VHF radio, foghorn, gyro-compass, navigational chart etc. for the correct functioning				
	PC2. check the steering gear to ensure its free movement				
	PC3. test the engine and gear box order telegraph to ensure they work as expected				
	PC4. test the communication equipment on the boat to ensure effective communication from the wheelhouse to the machinery space				
	PC5. check the navigation lights for faults and damage and repair or replace them, as required				
	PC6. ensure the navigation lights are of ensure the navigation lights are of marine standards				
	PC7. ensure main engine and gear box to be trouble free for multiday fishing				
	PC8. ensure the availability of spare navigation				

	lights on the boat for replacement during the fishing operation				
	PC9. ensure all mandatory signals display correctly on the fishing boat as per the coastal navigation rules, including both day and night time signals				
	PC10. test the searchlights to ensure their correct functioning				
	PC11. check the mast and ropes used to hoist signals for wear and tear or damage				
	PC12. check the anchor and anchor ropes/ chains for wear and tear or damage and repair or replace them, if required				
	<i>Check the safety and fire-fighting equipment</i>	10	16		10
	PC13. check the safety equipment such as Life Saving Appliances (LSA), Fire Fighting Equipment (FFA) and Light, Sound & Signals (L S & S) to ensure they are usable and without damage				
	PC14. ensure the availability of adequate safety equipment according to the crew on the boat				
	PC15. assist the deckhand in testing the fire extinguishers and ensuring there are no				

	obstructions in accessing them during an emergency				
	PC16. test the fire hoses to ensure they have no leakages				
	<i>Check weather forecasts and sea conditions</i>	6	6		6
	PC17. check the weather forecasts and warnings of storms or depressions from reliable sources before going into the sea				
	PC18. check the conditions in the sea to ensure conducive weather				
	NOS Total	30	40		30
AGR/N5005: Steer the boat during the fishing operation	<i>Navigate the boat</i>	10	20		12
	PC1. determine the shortest and safest route to the identified fishing location using Global Positioning System (GPS) tracker	-	-	-	-
	PC2.follow the recommended practices to prevent the fishing gear from getting tangled with the propeller, avoiding underwater dangers	-	-	-	-
	PC3. manoeuvre the boat in a manner to ensure the safety of crew while using the fishing gear and hauling fish into the boat	-	-	-	-
	PC4. monitor the ocean currents and wind direction and navigate accordingly	-	-	-	-

PC5. ensure the wheelhouse is manned by trained personnel at all times	-	-	-	-
<i>Follow the safety protocols while navigating, anchoring and harbouring</i>	14	14		12
PC6. steer the boat safely at the recommended speed, avoiding accidents and maintain stability of the boat	-	-	-	-
PC7. follow the recommended safety practices while navigating in low-visibility waters	-	-	-	-
PC8. use the relevant equipment to detect the presence of other boats, vessels and dredgers in the vicinity and alert them, maintaining the recommended distance	-	-	-	-
PC9. follow the recommended emergency procedures during the rough weather to manoeuvre the boat	-	-	-	-
PC10. navigate according to the instructions of the lighthouse	-	-	-	-
PC11. navigate to an appropriate spot to anchor the boat, ensuring anchor rope/ chain is adequately long to reach the bottom of the water body	-	-	-	-
PC12. anchor the boat safely at the identified spot and display the appropriate signals to indicate the	-	-	-	-

	stationary position of the boat				
	PC13. . communicate with the emergency services using the marine Very High Frequency (VHF) radio, AIS and co-ordinate with them for rescue operations	-	-	-	-
	PC14. . navigate in the sea following the applicable navigation guidelines, such as displaying appropriate lights and signals	-	-	-	-
	PC15. determine the direction of movement of other boats and ships and if they are anchored according to the navigation lights and signals displayed by them	-	-	-	-
	PC16. ensure there are no risks to the boats and vessels in the harbour and enter the harbour safely following the established procedure	-	-	-	-
	<i>Optimise resource utilization and manage waste</i>	6	6		6
	PC17. optimise the usage of water and other resources in various tasks and processes	-	-	-	-
	PC18. reduce, reuse, and recycle whenever possible	-	-	-	-
	PC19. use reusable grocery bags instead of disposable plastic or paper bags	-	-	-	-
	PC20. buy in bulk and avoid over-packaged				

	products				
	PC21. collect plastics, ghost gear, and other debris that gathers in the nets during fishing activities	-	-	-	-
	PC22. recycle the recyclable waste appropriately and dispose the non-recyclable waste in an environment-friendly manner	-	-	-	-
	NOS TOTAL	30	40		30
AGR/N5103: Follow the safety and hygiene practices in capture fisheries operations	<i>Follow onboard safe working practices</i>	10	12		8
	PC1. use all fishing machinery and equipment safely following the manufacturer's instructions	-	-	-	-
	PC2. carry out regular testing and maintenance of the life-saving, Light Sound & Signals (LS&S) and firefighting equipment	-	-	-	-
	PC3. use the life-saving equipment in case of rough weather/ emergencies	-	-	-	-
	<i>Follow safety guidelines in water bodies</i>	8	12		10
	PC4. use the trim & stability booklet of fishing vessel properly	-	-	-	-
	PC5. use the relevant equipment to detect ships/ boats in the vicinity and take appropriate measures to avoid collisions	-	-	-	-
	PC6. detect underwater dangers along the	-	-	-	-

	fishing route and take appropriate measures to mitigate them				
	<i>Follow the fish capturing and handling guidelines</i>	12	16		12
	PC7. follow the applicable laws related to fishing methods, use of different types of fishing gear, conservation of banned species, disposal of dead/ damaged fish, etc.	-	-	-	-
	PC8. identify poisonous organisms caught with the fish and dispose them safely	-	-	-	-
	PC9. handle and clean the fish ensuring minimum damage to it	-	-	-	-
	PC10. store the fish under the recommended temperature and in hygienic conditions to maintain its freshness	-	-	-	-
	NOS TOTAL	30	40		30
DGT/VSQ/N0102: Employability Skills (60 Hours)	<i>Introduction to Employability Skills</i>	1	1	-	-
	PC1. identify employability skills required for jobs in various industries	-	-	-	-
	PC2. identify and explore learning and employability portals	-	-	-	-
	<i>Constitutional values – Citizenship</i>	1	1	-	-
	PC3. recognize the significance of constitutional				

	values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.	-	-	-	-
	PC4. follow environmentally sustainable practices	-	-	-	-
	<i>Becoming a Professional in the 21st Century</i>	2	4	-	-
	PC5. recognize the significance of 21st Century Skills for employment				
	PC6. practice the 21st Century Skills such as Self Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life				
	<i>Basic English Skills</i>	2	3	-	-
	PC7. use basic English for everyday conversation in different contexts, in person and over the telephone	-	-	-	-
	PC8. read and understand routine information, notes, instructions, mails, letters etc. written in English	-	-	-	-

	PC9. write short messages, notes, letters, e-mails etc. in English				
	<i>Career Development & Goal Setting</i>	1	2	-	-
	PC10. understand the difference between job and career				
	PC11. prepare a career development plan with short- and long-term goals, based on aptitude				
	<i>Communication Skills</i>	2	2	-	-
	PC12. follow verbal and non-verbal communication etiquette and active listening techniques in various settings				
	PC13. work collaboratively with others in a team				
	<i>Diversity & Inclusion</i>	1	2	-	-
	PC14. communicate and behave appropriately with all genders and PwD	-	-	-	-
	PC15. escalate any issues related to sexual harassment at workplace according to POSH Act	-	-	-	-
	<i>Financial and Legal Literacy</i>	2	3	-	-
	PC16. select financial institutions, products and services as per requirement	-	-	-	-
	PC17. carry out offline and online financial	-	-	-	-

	transactions, safely and securely				
	PC18. identify common components of salary and compute income, expenses, taxes, investments etc	-	-	-	-
	PC19. identify relevant rights and laws and use legal aids to fight against legal exploitation	-	-	-	-
	<i>Essential Digital Skills</i>	3	4	-	-
	PC20. operate digital devices and carry out basic internet operations securely and safely	-	-	-	-
	PC21. use e- mail and social media platforms and virtual collaboration tools to work effectively	-	-	-	-
	PC22. use basic features of word processor, spreadsheets, and presentations	-	-	-	-
	<i>Entrepreneurship</i>	2	3	-	-
	PC23. identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research	-	-	-	-
	PC24. develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion	-	-	-	-
	PC25. identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the	-	-	-	-

	potential business opportunity				
	<i>Customer Service</i>	1	2	-	-
	PC26. identify different types of customers				
	PC27. identify and respond to customer requests and needs in a professional manner.				
	PC28. follow appropriate hygiene and grooming standards				
	<i>Getting ready for apprenticeship & Jobs</i>	2	3	-	-
	PC29. create a professional Curriculum vitae (Résumé)				
	PC30. search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively				
	PC31. apply to identified job openings using offline /online methods as per requirement				
	PC32. answer questions politely, with clarity and confidence, during recruitment and selection				
	PC33. identify apprenticeship opportunities and register for it as per guidelines and requirements				
	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