



**QP Name: Fishing Boat Deckhand**

**QP Code: AGR/Q5101**

**Version: 3.0**

**NSQF Level: 4**

**Model Curriculum Version: 2.0**

Agriculture Skill Council of India || Agriculture Skill Council of India (ASCI), 6th Floor, GNG Tower, Plot  
No. 10, Sector - 44

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## Training Parameters

<b>Sector</b>	Agriculture
<b>Sub-Sector</b>	Fisheries
<b>Occupation</b>	Assistance (Fisheries)
<b>Country</b>	India
<b>NSQF Level</b>	4
<b>Aligned to NCO/ISCO/ISIC Code</b>	NCO-2015/6223.9900
<b>Minimum Educational Qualification and Experience</b>	<p>Minimum Educational Qualification: 12th grade pass OR Completed 2nd year of 3-year diploma (after 10th) and pursuing regular diploma OR 10th grade pass plus 2-year NTC OR 10th grade pass plus 1-year NTC plus 1 year NAC OR 8th pass plus 2-year NTC plus 1-Year NAC plus CITS OR 10th grade pass and pursuing continuous schooling OR 10th Grade Pass with 2-year relevant experience OR Previous relevant Qualification of NSQF Level 3.0 with minimum education as 8th Grade pass with 3- year relevant experience OR Previous relevant Qualification of NSQF Level 3.5 with 1.5- year relevant experience</p>
<b>Pre-Requisite License or Training</b>	NA
<b>Minimum Job Entry Age</b>	18 Years
<b>Last Reviewed On</b>	24/02/2022
<b>Next Review Date</b>	24/02/2025
<b>NSQC Approval Date</b>	24/02/2022
<b>QP Version</b>	3.0
<b>Model Curriculum Creation Date</b>	24/02/2022

<b>Model Curriculum Valid Up to Date</b>	24/02/2025
<b>Model Curriculum Version</b>	2.0
<b>Minimum Duration of the Course</b>	390 Hours
<b>Maximum Duration of the Course</b>	390 Hours

## Program Overview

This section summarizes the end objectives of the program along with its duration.

### Training Outcomes

At the end of the program, the learner should have acquired the listed knowledge and skills to:

- Describe the process of preparing the deck for the capture operation.
- Demonstrate the process of carrying out deck work during the capture operation.
- Describe the process of undertaking employability and entrepreneurial practices.
- Demonstrate various practices to maintain personal hygiene, cleanliness and safety at the workplace.

### Compulsory Modules

The table lists the modules and their duration corresponding to the Compulsory NOS of the QP.

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
<b>Bridge Module</b>	<b>05:00</b>	<b>0:00</b>	<b>0:00</b>	<b>0:00</b>	<b>05:00</b>
Module 1: Introduction to the role of a Fishing Boat Deckhand	05:00	0:00	0:00	0:00	05:00
<b>AGR/N5101 Prepare the deck for the capture operation</b> <b>NOS Version- 2.0</b> <b>NSQF Level- 4</b>	<b>25:00</b>	<b>60:00</b>	<b>0:00</b>	<b>0:00</b>	<b>85:00</b>
Module 2: Process of preparing the deck for the capture operation	25:00	60:00	0:00	0:00	85:00
<b>AGR/N5102 Carry out deck work during the capture operation</b> <b>NOS Version- 2.0</b> <b>NSQF Level- 4</b>	<b>30:00</b>	<b>90:00</b>	<b>0:00</b>	<b>0:00</b>	<b>120:00</b>
Module 3: Process of carrying out deck work during the capture operation	30:00	90:00	0:00	0:00	120:00
<b>AGR/N5103: Follow the safety and hygiene practices in capture fisheries operations</b> <b>NOS Version- 2.0</b>	<b>30:00</b>	<b>30:00</b>	<b>0:00</b>	<b>0:00</b>	<b>60:00</b>

<b>NSQF Level- 4</b>					
Module 4: Safety and hygiene practices in capturing fisheries	30:00	30:00	0:00	0:00	60:00
<b>DGT/VSQ/N0102 Employability Skills NOS Version-1.0 NSQF Level-4</b>	<b>60:00</b>	<b>00:00</b>	<b>0:00</b>	<b>0:00</b>	<b>60:00</b>
Module 5: Employability Skills	60:00	00:00	0:00	0:00	60:00
<b>Total Duration</b>	<b>150:00</b>	<b>180:00</b>	<b>0:00</b>	<b>0:00</b>	<b>330:00</b>
<b>OJT: 60 hours</b>					

# Module Details

## Module 1: Introduction to the role of a Fishing Boat Deckhand

### Bridge Module

#### Terminal Outcomes:

- Discuss the job role of a Fishing Boat Deckhand.

<b>Duration: 05:00</b>	<b>Duration: 0:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Describe the size and scope of the Agriculture industry and its sub-sectors.</li> <li>• Discuss the role and responsibilities of a Fishing Boat Deckhand.</li> <li>• Identify various employment opportunities for a Fishing Boat Deckhand.</li> </ul>	
<b>Classroom Aids</b>	
Training Kit - Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop, Video Films	
<b>Tools, Equipment and Other Requirements</b>	
NA	

## Module 2: Process of preparing the deck for the capture operation

### Mapped to AGR/N5101 v2.0

#### Terminal Outcomes:

- Describe the process of preparing the deck, fish hold, wheelhouse, food storage and cooking areas.
- Demonstrate the process of carrying out repair and maintenance of the deck.
- Demonstrate the process of checking the safety and firefighting equipment.
- Demonstrate various waste management practices.

<b>Duration: 25:00</b>	<b>Duration: 60:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Explain the importance of securing all the loose items on the deck.</li> <li>• List various equipment used on a fishing vessel.</li> <li>• Describe the functions of various equipment used on a fishing vessel.</li> <li>• Explain the importance of arranging for the safe storage of tools, equipment and other materials on the deck.</li> <li>• Explain the importance of ensuring the availability of required shapes and signals to be hoisted on the mast in the vessel.</li> <li>• Explain the importance of checking that safety equipment such as life jackets and safety lanyards are in usable condition.</li> <li>• Explain the importance of ensuring there are no obstructions in accessing the fire-fighting equipment.</li> <li>• Explain the importance of recycling and disposing different types of waste as per the applicable regulations.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate the process of cleaning the wheelhouse and the equipment.</li> <li>• Demonstrate how to scrub clean the deck floor.</li> <li>• Show how to clean and dry the fish holds.</li> <li>• Demonstrate the process of cleaning the food storage and cooking area.</li> <li>• Demonstrate the process of checking the fishing gear for wear and tear or damage.</li> <li>• Demonstrate the process of checking all the blocks, tackles, pulleys ropes, wire ropes, cordage, chains connecting the blocks, anchor and chain/ rope for wear and tear or damage.</li> <li>• Demonstrate the process of testing the booms and davits for the correct functioning and carrying out repair and maintenance as required.</li> <li>• Demonstrate the process of carrying out resurfacing and painting on the deck floor and walls.</li> <li>• Demonstrate how to check the pulleys for smooth movement.</li> <li>• Show how to replace the damaged ropes and cordage.</li> <li>• Demonstrate the process of applying the recommended grade of grease or lubricant on the wire ropes as per the oiling schedule.</li> </ul>

	<ul style="list-style-type: none"> <li>• Demonstrate how to test the fire extinguishers for the correct functioning.</li> <li>• Show how to test the fire hoses to ensure they have no leakages.</li> <li>• Demonstrate the process of recycling and disposing different types of waste appropriately.</li> </ul>
<p><b>Classroom Aids</b></p>	
<p>Training Kit (Trainer Guide, Presentations) Whiteboard, Marker, Projector, Laptop</p>	
<p><b>Tools, Equipment and Other Requirements</b></p>	
<p>Models Of Traditional, Motorised And Mechanised Fishing Crafts, Samples For Corrosion, Fouling And Protection Of Fishing Crafts, Swimming Facility, Fishing Boat</p>	

## Module 3: Process of carrying out deck work during the capture operation

### Mapped to ARG/N5102 v2.0

#### Terminal Outcomes:

- Demonstrate the process of carrying out deck work.
- Describe the process of assisting in mooring the vessel and unloading the catch.
- Demonstrate various practices for effective resource optimisation.
- Discuss ways to promote diversity and inclusion at the workplace.

Duration: 30:00	Duration: 90:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> <li>• Explain how to use navigational equipment and aids, and plot safe courses.</li> <li>• State appropriate measures to be taken on the deck to protect against any sudden and violent movements.</li> <li>• List applicable watch-keeping and steering responsibilities.</li> <li>• Explain the importance of storing the catch at the recommended temperature, and ensuring timely refrigeration and hygienic conditions.</li> <li>• State various mandatory signals and shapes to be hoisted in the vessel.</li> <li>• Explain the importance of maintaining a vigil in the wheelhouse at all times and ensuring the vessel is well illuminated at night.</li> <li>• Explain the importance of ensuring the lifesaving equipment is ready for use at all times.</li> <li>• Describe the process and importance of maintaining constant communication with the relevant authorities through the marine VHF radio and complying with the given instructions or warnings.</li> <li>• State the recommended safety procedures to be followed during the rough weather.</li> <li>• Explain the importance of unloading the catch at the harbour, protecting it from damage and contamination.</li> <li>• Explain the use of fishing gear,</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate the process of steering the vessel through co-ordination with the driver.</li> <li>• Demonstrate the process of anchoring the vessel.</li> <li>• Demonstrate the process of setting up the fishing gear to capture fish.</li> <li>• Demonstrate the process of carrying out maintenance of the fishing gear and deck equipment during the capture operation.</li> <li>• Demonstrate the process of mooring the vessel at the harbour.</li> <li>• Show how to unload the catch at the harbour.</li> <li>• Prepare a sample record of the catch.</li> <li>• Demonstrate various practices to optimise the usage of various resources such as water and electricity.</li> <li>• Demonstrate appropriate verbal and non-verbal communication that is respectful of genders and disability.</li> </ul>

<p>various deck equipment, ropes and cordage used on board.</p> <ul style="list-style-type: none"> <li>• Explain the operation of life-saving units.</li> <li>• Explain basic seamanship activities, ropework and deck work.</li> <li>• Describe the process of sending distress messages during an emergency using Very High Frequency (VHF) radio.</li> <li>• State appropriate signals to be displayed while in distress or emergency.</li> <li>• Explain the benefits of resource optimisation.</li> <li>• Explain the importance of inclusion of all genders and People with Disability (PwD) at the workplace.</li> </ul>	
<p><b>Classroom Aids</b></p>	
<p>Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop</p>	
<p><b>Tools, Equipment and Other Requirements</b></p>	
<p>Hand Gloves, Boots, Deep Sea Multi Day Fishing Vessel With Trawling, Long Lining Gill Netting And Seine Net Operating Facilities And Cold Storage Of Fish</p>	

## Module 4: Safety and hygiene practices in capturing fisheries

### Mapped to AGR/N5103 v2.0

#### Terminal Outcomes:

- Discuss how to adhere to onboard safe working practices.
- Describe various safety guidelines in water bodies.
- Describe various fish capturing and handling guidelines.

<b>Duration: 30:00</b>	<b>Duration: 30:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• State the relevant regulations to be followed in the marine waters such as Coastal Regulation Zone (CRZ) guidelines.</li> <li>• Describe the process of using the relevant equipment to detect ships/boats in the vicinity and the appropriate measures to be followed to avoid collisions.</li> <li>• Describe the process of detecting underwater dangers along the fishing route and appropriate measures to be taken to mitigate them.</li> <li>• State the applicable laws related to fishing methods, use of different types of fishing gear, conservation of banned species, disposal of dead/damaged fish, etc.</li> <li>• Describe the process of identifying poisonous creatures caught with the fish.</li> <li>• State the temperature and hygiene requirements for storing the fish to maintain its freshness.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate how to use fishing machinery and equipment safely following the manufacturer's instructions.</li> <li>• Demonstrate the process of carrying out regular testing and maintenance of the life-saving and firefighting equipment.</li> <li>• Demonstrate the use of life-saving equipment in case of rough weather/emergencies.</li> <li>• Show how to use the relevant equipment to detect ships/boats in the vicinity.</li> <li>• Demonstrate the process of detecting underwater dangers along the fishing route.</li> <li>• Demonstrate the process of Safely disposing the poisonous organisms caught with the fish.</li> <li>• Demonstrate the process of handling and cleaning the fish ensuring minimum damage to it.</li> </ul>
<b>Classroom Aids</b>	
Training Kit - Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop, Video Films	
<b>Tools, Equipment and Other Requirements</b>	
Safety Equipment (Personal Floatation Devices Such As Life Jackets Or Lifeboat; Kill Switch; Fire Extinguisher; Rope; Signaling Devices Such As Handheld Flair, Rocket Parachute (Distress Rocket) Or Smoke Signale; Weather Radio, ILR, HRG Unit; Etc.); Life-Saving Appliances Such As SART And EPIRB; Anchor Supporting Equipment (Plow Style, Danforth Anchors, Mushroom Anchor); Personal Protective Equipment: Polarised Sunglasses, Sunscreen Of Required Sun Protection Factor, Foul Weather Gear.	

## Module 5: Employability Skills (60 hours)

Mapped to NOS DGT/VSQ/N0102 v1.0

**Duration: 60:00**

### Key Learning Outcomes

#### Introduction to Employability Skills Duration: 1.5 Hours

After completing this programme, participants will be able to:

1. Discuss the Employability Skills required for jobs in various industries
2. List different learning and employability related GOI and private portals and their usage

#### Constitutional values - Citizenship Duration: 1.5 Hours

3. Explain the constitutional values, including civic rights and duties, citizenship, responsibility towards society and personal values and ethics such as honesty, integrity, caring and respecting others that are required to become a responsible citizen
4. Show how to practice different environmentally sustainable practices.

#### Becoming a Professional in the 21st Century Duration: 2.5 Hours

5. Discuss importance of relevant 21st century skills.
6. Exhibit 21st century skills like Self-Awareness, Behavior Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn etc. in personal or professional life.
7. Describe the benefits of continuous learning.

#### Basic English Skills Duration: 10 Hours

8. Show how to use basic English sentences for everyday conversation in different contexts, in person and over the telephone
9. Read and interpret text written in basic English
10. Write a short note/paragraph / letter/e -mail using basic English

#### Career Development & Goal Setting Duration: 2 Hours

11. Create a career development plan with well-defined short- and long-term goals

#### Communication Skills Duration: 5 Hours

12. Demonstrate how to communicate effectively using verbal and nonverbal communication etiquette.
13. Explain the importance of active listening for effective communication
14. Discuss the significance of working collaboratively with others in a team

#### Diversity & Inclusion Duration: 2.5 Hours

15. Demonstrate how to behave, communicate, and conduct oneself appropriately with all genders and PwD
16. Discuss the significance of escalating sexual harassment issues as per POSH act.

#### Financial and Legal Literacy Duration: 5 Hours

17. Outline the importance of selecting the right financial institution, product, and service
18. Demonstrate how to carry out offline and online financial transactions, safely and securely
19. List the common components of salary and compute income, expenditure, taxes, investments etc.
20. Discuss the legal rights, laws, and aids

#### **Essential Digital Skills Duration: 10 Hours**

21. Describe the role of digital technology in today's life
22. Demonstrate how to operate digital devices and use the associated applications and features, safely and securely
23. Discuss the significance of displaying responsible online behavior while browsing, using various social media platforms, e-mails, etc., safely and securely
24. Create sample word documents, excel sheets and presentations using basic features
25. utilize virtual collaboration tools to work effectively

#### **Entrepreneurship Duration: 7 Hours**

26. Explain the types of entrepreneurship and enterprises
27. Discuss how to identify opportunities for potential business, sources of funding and associated financial and legal risks with its mitigation plan
28. Describe the 4Ps of Marketing-Product, Price, Place and Promotion and apply them as per requirement
29. Create a sample business plan, for the selected business opportunity

#### **Customer Service Duration: 5 Hours**

30. Describe the significance of analysing different types and needs of customers
31. Explain the significance of identifying customer needs and responding to them in a professional manner.
32. Discuss the significance of maintaining hygiene and dressing appropriately

#### **Getting Ready for apprenticeship & Jobs Duration: 8 Hours**

33. Create a professional Curriculum Vitae (CV)
34. Use various offline and online job search sources such as employment exchanges, recruitment agencies, and job portals respectively
35. Discuss the significance of maintaining hygiene and confidence during an interview
36. Perform a mock interview
37. List the steps for searching and registering for apprenticeship opportunities

# Annexure

## Trainer Requirements

Trainer Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training Experience		Remarks
		Years	Specialization	Years	Specialization	
10 <sup>th</sup> Class		5	Maintenance and upkeep of the fishing boat	0		Marine Capture Fisherman cum Primary Processor/ Mariculture Operator with 5 Years of experience. Experience certificate issued by Head of Grampanchayat/ Loan disbursing bank or financial institution/ registered fisheries society/ State department of fisheries on official letter Head
Diploma	Fishries	3	Maintenance and upkeep of the fishing boat	0		Regular Diploma more than 15 months in fisheries
Graduate	Agriculture/ Fisheries/ Zoology	2	Maintenance and upkeep of the fishing boat	0		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)
B.Tech	Fisheries	1	Maintenance and upkeep of the fishing boat	0		
M.Tech	Fisheries	0		0		
Trainer Certification						
Domain Certification			Platform Certification			
Certified for Job Role “ <b>Fishing Boat Deckhand</b> ”, mapped to QP: “AGR/Q5101, v3.0”, Minimum accepted score is 80%			Recommended that the Trainer is certified for the Job Role: “Trainer (Vet and Skills)”, mapped to the Qualification Pack: “MEP/Q2601, v2.0”. The minimum accepted score as per MEPSC guidelines is 80%.			

## Assessor Requirements

Assessor Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training/Assessment Experience		Remarks
		Years	Specialization	Years	Specialization	
B.F. Sc		4	In Fisheries Science/ Zoology/ Aquaculture/ Applied aquaculture/ Marine Biology or related streams	0		Practical skills and knowledge required to clear the decks, prepare and maintain equipment and handle the catch on offshore fishing vessels
B. Tech	Fisheries Engineering and related streams	4	In Fisheries Science/ Zoology/ Aquaculture/ Applied aquaculture/ Marine Biology or related streams	0		Practical skills and knowledge required to clear the decks, prepare and maintain equipment and handle the catch on offshore fishing vessels
B. Sc	Fisheries and related streams	5	In Fisheries Science/ Zoology/ Aquaculture/ Applied aquaculture/ Marine Biology or related streams	0		Practical skills and knowledge required to clear the decks, prepare and maintain equipment and handle the catch on offshore fishing vessels
M. Tech	Aqua cultural Engineering/ Fisheries engineering and related streams	2	In Fisheries Science/ Zoology/ Aquaculture/ Applied aquaculture/ Marine Biology or related streams	0		Practical skills and knowledge required to clear the decks, prepare and maintain equipment and handle the catch on

						offshore fishing vessels
M. F. Sc		2	In Fisheries Science/ Zoology/ Aquaculture/ Applied aquaculture/ Marine Biology or related streams	0		Practical skills and knowledge required to clear the decks, prepare and maintain equipment and handle the catch on offshore fishing vessels
M. Sc	Fisheries and related streams	2	In Fisheries Science/ Zoology/ Aquaculture/ Applied aquaculture/ Marine Biology or related streams	0		Practical skills and knowledge required to clear the decks, prepare and maintain equipment and handle the catch on offshore fishing vessels
PhD	Fisheries Science and related streams	1	In Fisheries Science/ Zoology/ Aquaculture/ Applied aquaculture/ Marine Biology or related streams	0		Practical skills and knowledge required to clear the decks, prepare and maintain equipment and handle the catch on offshore fishing vessels

### Assessor Certification

Domain Certification	Platform Certification
Certified for Job Role “ <b>Fishing Boat Deckhand</b> ”, mapped to QP: “AGR/Q5101, v3.0”, Minimum accepted score is 80%	Certified for the Job Role: “Assessor (Vet and Skills)”, mapped to the Qualification Pack: “MEP/Q2701, v2.0”, with a minimum score of 80%.

## Assessment Strategy

### 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 empaneled 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 the ground through qualified and ToA certified assessors.

An individual must have adequate knowledge and skills to perform a specific task, weightage for different aspects of the assessment is 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 empaneled assessment partners. Based on the results of the assessment; ASCI will certify the learners/candidates

### Testing Environment

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

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

- Multilingual assessments (ASCI is conducting the 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 the 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 the training / within 7 days of completion of training.
- Assessment will be conducted at the training venue
- The 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 practice 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 questions, etc. which will test the trainee on his theoretical knowledge of the subject.
- The theory, practical and viva assessments will be carried out on the same day. In case of a greater number of candidates, the number of assessors and venue facilitation be increased and facilitated

<b>Assessment</b>			
<b>Assessment Type</b>	<b>Formative or Summative</b>	<b>Strategies</b>	<b>Examples</b>
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 the usability of job roles/advantages /importance of adherence to procedures. Viva will be used to gauge trainee's confidence and correct knowledge in handling the job situation

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

## 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, behavioural traits and domain knowledge.

**Theoretical Knowledge** - Item constructs and types are determined by a 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 that 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 the 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 a 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, dos and don'ts, subjective questions to check the understanding of practical tasks.

The assessor has to go through an orientation program organized by the Assessment Agency. The training would give an overview to the assessors on the overall framework of QP evaluation. The assessor shall be given a NOS and PC level overview of each QP as applicable. The 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 that will maintain the standardization of the marking scheme.

### Type of Evidence and Evidence Gathering Protocol:

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

- GeoTagging to track ongoing assessment
- AA's coordinator emails the list of documents and evidence (photos and videos) to the assessor one day before the assessment. The list is mentioned below:
  - Signed Attendance sheet
  - Assessor feedback sheet
  - Candidate feedback sheet

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

### **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 a check on assessment quality and ensure assessment is carried out in a fair and transparent manner
- Aadhar verification of candidates
- Evening Check (Post Assessment): Calls are made to the ground team to ensure the event is over by what time and the documentation is done properly or not.
- TP Calling: To keep a check on malpractices, an independent audit team calls the TP on a recorded line to take confirmation if there was any malpractice activity observed in the assessment on part of the AA/SSC team. If calls are not connected, an email is sent to TP SPOC for taking their confirmation
- Video and Picture Evidence: Backend team collects video and pictures for assessment on a real-time basis and highlights any issue such as students sitting idle/ trainer helping the candidates during the assessment.
- Surprise Visit: Time to time SSC/AA Audit team can visit the assessment location and conduct a surprise audit for the assessment carried out by the ground team.
- Geo Tagging: On the day of the assessment, each technical SPOC is required to login into our internal app which is Geotagged. Any deviation with the centre address needs to be highlighted to the assessment team on a real-time basis.

### **Method for assessment documentation, archiving, and Access:**

- ASCI have a fully automated result generation process in association with multiple AAs
- Theory, Practical and Viva marks form the basis of the results and encrypted files generated to avoid data manipulation. All responses were captured and stored in the System with Time-Stamps at the end of AAs and SSC. NOS-wise and PC-wise scores can

be generated.

- Maker Checker concept: One person prepares the results and another audit result which is internally approved by AA at first and then gets vetted at the end of SSC
- All softcopies of documents are received from the on-ground tech team over email. The same is downloaded by our internal backend team and saved in Repository. The repository consists of scheme-wise folders. These scheme-wise folders have two 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 the 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 candidates shall be stored and available for review (retained for 5 years/ till the conclusion of the project or scheme)

# References

## Glossary

Term	Description
<b>Declarative Knowledge</b>	Declarative knowledge refers to facts, concepts and principles that need to be known and/or understood in order to accomplish a task or to solve a problem.
<b>Key Learning Outcome</b>	The Key learning outcome is the statement of what a learner needs to know, understand and be able to do in order to achieve the terminal outcomes. A set of key learning outcomes will make up the training outcomes. Training outcome is specified in terms of knowledge, understanding (theory) and skills (practical application).
<b>OJT (M)</b>	On-the-job training (Mandatory); trainees are mandated to complete specified hours of training on-site
<b>OJT (R)</b>	On-the-job training (Recommended); trainees are recommended the specified hours of training on-site
<b>Procedural Knowledge</b>	Procedural knowledge addresses how to do something, or how to perform a task. It is the ability to work or produce a tangible work output by applying cognitive, affective or psychomotor skills.
<b>Training Outcome</b>	The Training outcome is a statement of what a learner will know, understand and be able to do upon the completion of the training.
<b>Terminal Outcome</b>	The Terminal outcome is a statement of what a learner will know, understand and be able to do upon the completion of a module. A set of terminal outcomes help to achieve the training outcome.

## Acronyms and Abbreviations

Term	Description
AGR	Agriculture
CRS	Coastal Regulation Zone
NOS	National Occupational Standard (s)
NSQF	National Skills Qualifications Framework
OJT	On-the-job Training
PwD	People with Disability
PPE	Personal Protective Equipment
QP	Qualifications Pack
VHF	Very High Frequency