Model Curriculum

QP Name: Solar Pump Technician

QP Code: AGR/Q6701

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

Solar Pump Technician

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Training Parameters

Sector	Agriculture
Sub-Sector	Forestry, Environment and Renewable Energy Management
Occupation	Renewable Energy Management
Country	India
NSQF Level	4
Aligned to NCO/ISCO/ISIC Code	NCO-2015/3142
Minimum Educational Qualification and Experience	11th grade pass OR 10th Pass with 2 Year of relevant experience OR 10th Class Pass and pursuing continuous regular schooling OR 8th Class with 4 Years of relevant experience OR Previous relevant qualification of NSQF Level 3 with minimum education as 5th grade pass with 2 Years of relevant experience Minimum Age: 18 Years
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years
Last Reviewed On	17/11/2022
Next Review Date	30/12/2024
NSQC Approval Date	30/12/2021
QP Version	3.0
Model Curriculum Creation Date	30/12/2021
Model Curriculum Valid Up to Date	30/12/2024
Model Curriculum Version	2.0

Minimum Duration of the Course	390 Hours
Maximum Duration of the Course	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 conducting the site assessment and planning the solar pump installation.
- Demonstrate the process of installing the solar panel, battery, plumbing system and pump.
- Demonstrate the process of carrying out maintenance and repair of the solar pump.
- Demonstrate various practices to maintain personal hygiene, cleanliness, and safety at the workplace.
- Explain the importance of following the recommended inclusive practices for all genders and Persons with Disabilities (PwD).

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
AGR/N6701 Conduct site assessment and procure raw material NOS Version-3.0 NSQF Level-4	**25:00**	**35:00**	**0:00**	**0:00**	**60:00**
Module 1: Introduction to the role of a Solar Pump Technician	05:00	0:00	0:00	0:00	05:00
Module 2: Process of conducting site assessment and planning the solar pump installation	20:00	35:00	0:00	0:00	55:00
AGR/N6702 Install solar panel and battery NOS Version-3.0 NSQF Level-4	**30:00**	**60:00**	**0:00**	**0:00**	**90:00**
Module 3: Installation of the solar panel and battery	30:00	60:00	0:00	0:00	90:00
AGR/N6703 Install plumbing system and pump NOS Version-3.0 NSQF Level-4	**30:00**	**60:00**	**0:00**	**0:00**	**90:00**

Module 4: Installation of the plumbing system and water pump	30:00	60:00	0:00	0:00	90:00
AGR/N6705 Carry out maintenance and repair of solar pump **NOS Version-3.0** **NSQF Level-4**	**20:00**	**40:00**	**0:00**	**0:00**	**60:00**
Module 5: Repair and maintenance of solar pump setup	20:00	40:00	0:00	0:00	60:00
ELE/N9953 Ensure safety at workplace **NOS Version-1.0** **NSQF Level-4**	**15:00**	**15:00**	**0:00**	**0:00**	**30:00**
Module 6: Safety procedures at workplace	15:00	15:00	0:00	0:00	30:00
DGT/VSQ/N0102 Employability Skills **NOS Version-1.0** **NSQF Level-4**	**60:00**	**00:00**	**0:00**	**0:00**	**60:00**
Module 7: Employability Skills	60:00	00:00	0:00	0:00	60:00
Total Duration	**180:00**	**210:00**	**0:00**	**0:00**	**390:00**

Module Details

Module 1: Introduction to the role of a Solar Pump Technician
Bridge Module, Mapped to AGR/N6701 v3.0

Terminal Outcomes:

- Discuss the job role of a Solar Pump Technician.

Duration: 0500	Duration: 0:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Describe the size and scope of the Agriculture industry and its sub-sectors. - Discuss the role and responsibilities of a Solar Pump Technician. - Discuss various employment opportunities for a Solar Pump Technician.	
Classroom Aids	
Training kit - Trainer guide, presentations, whiteboard, marker, projector, laptop	
Tools, Equipment and Other Requirements	
NA	

Module 2: Process of conducting site assessment and planning the solar pump installation
Mapped to AGR/N6701 v3.0

Terminal Outcomes:

- Describe the process of planning and conducting the site visit to assess the site conditions and client's requirements.
- Describe the process of planning the installation of a solar pump.

Duration: 20:00	Duration: 35:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Explain the business code of conduct to be followed during the site visit and customer dealing. - Describe the process of conducting a site visit for the purpose of installing a solar pump. - List various parameters to assess to find an ideal spot for the installation of a solar pump and panels. - Describe the process of planning the installation of a solar pump according to the site and client's requirements. - List various resources required for the installation of a solar pump and panels.	- Roleplay to demonstrate the business code of conduct to be followed during the site visit and customer dealing. - Show how to check the soil type, land surface and sunlight exposure at the site proposed for the installation of the solar pump. - Prepare a sample plan for the installation of the solar pump including the cost estimates.
Classroom Aids	
Training kit (Trainer guide, Presentations). Whiteboard, Marker, projector, laptop	
Tools, Equipment and Other Requirements	
Solar Pathfinder (evaluates the solar energy potential at a site), Compass (not needed if you're using a Solar Pathfinder), Maps (reference for location latitude and magnetic declination), Digital camera	

Module 3: Installation of the solar panel and battery
Mapped to ARG/N6702 v3.0

Terminal Outcomes:

- Demonstrate the process of installing the solar panel and battery.

Duration: 30:00	Duration: 60:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Describe the process of installing the solar cable, plugs, spare fuse, solar panels and battery. - Describe the process of testing battery and system voltage. - Explain the importance of leaving a clean site after completing the solar pump installation.	- Demonstrate the process of preparing the required material, accessories, tools, equipment and Personal Protective Equipment (PPE) for the installation of solar panels and battery. - Show how to test the Photo-Voltaic (PV) module for any defects and live current before installation. - Show how to assess the degree of inclination and angle of tilt of the PV module. - Demonstrate the process of mounting the PV to allow it to absorb the maximum solar power. - Demonstrate the process of installing solar cable, plugs and spare fuse and solar panels firmly. - Show how to connect the system to a battery using the recommended grade of cables. - Demonstrate the process of applying the necessary adjustments to match output requirements. - Show how to conduct a test to ensure the solar pump is functioning as expected.
Classroom Aids	
Training kit (Trainer guide, Presentations). Whiteboard, Marker, projector, laptop	
Tools, Equipment and Other Requirements	
Solar panel, battery, Pump, Pipes, tubes, fittings, gloves, first aid kit	

Module 4: Installation of the plumbing system and water pump
Mapped to AGR/N6703 v3.0

Terminal Outcomes:

- Demonstrate the process of installing the plumbing system and solar pump.
- Demonstrate various practices for effective resource optimisation.
- Demonstrate various practices for effective waste disposal.
- Discuss ways to promote diversity and inclusion at work.

Duration: 30:00	Duration: 60:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Describe the process of installing plumbing fittings and fixtures such as valves, clamps, elbows, sprinklers, taps, etc. - Explain different methods of cutting, bending and joining fittings and fixtures. - List various hand and power tools required for the installation of the plumbing system and solar pump. - Explain the importance of guiding the farmers on minor repair and maintenance of the solar pump and panels along with the applicable safety precautions. - Explain the benefits of resource optimisation. - Describe the methods of recycling and disposing of different types of waste. - Explain the importance of inclusion of all genders and Persons with Disability (PwD) at work.	- Show how to assemble pipe sections, fittings and tubing and joining the pipes. - Demonstrate the use of relevant hand and power tools. - Demonstrate the process of installing plumbing fittings and fixtures such as valves, clamps, elbows, sprinklers, taps, etc. - Demonstrate the process of connecting the pump to the battery or inverter according to the type of pump. - Demonstrate the process of connecting pipes to the pump from the source to the destination of supply. - Demonstrate various practices to optimise the usage of various resources such as water and electricity. - Demonstrate the process of recycling and disposing of different types of waste in compliance with the applicable laws and regulations. - Demonstrate appropriate verbal and non-verbal communication that is respectful of all genders and PwD.
Classroom Aids	
Training kit (Trainer guide, Presentations)	
Tools, Equipment and Other Requirements	
Pump, Pipes, tubes, fittings	

Module 5: Repair and maintenance of solar pump setup
Mapped to NOS AGR/N6705 v3.0

Terminal Outcomes:

- Demonstrate the process of carrying out maintenance and repair of solar pump and panels.

Duration: 20:00	Duration: 40:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Describe the use of relevant diagnostic, maintenance and repair tools and equipment. - Describe the process of examining the insulation of wires. - Explain various faults experienced with the electrical and plumbing systems in a solar pump setup. - Explain the importance of maintaining the record of maintenance activities. - Discuss the maintenance schedule for the solar pump and panels.	- Show how to inspect the solar pump visually and using the diagnostic tools. - Demonstrate the process of identifying any malfunctions and repair requirements based on the diagnosis. - Show how to examine the insulations of wires. - Demonstrate the process of checking the plumbing system for any blockages, water level and pump issues. - Demonstrate the process of replacing any faulty components of the solar pump setup. - Demonstrate how to integrate all the components as per the original design after maintenance. - Prepare a sample record of maintenance and repair services carried out.
Classroom Aids:	
Training kit (Trainer guide, Presentations)	
Tools, Equipment and Other Requirements	
Wire stripper/crimper, Screwdrivers, Electrical tape, Teflon tape for tight thread connections, adjustable wrenches, Heat gun or torch for heat-shrink sleeves, Multimeter	

Module 6: Safety procedures at the workplace
Mapped to NOS ELE/N9953 v1.0

Terminal Outcomes:

- Describe how to adhere to safety guidelines.
- Describe the importance of participating in the company's safety drills and workshops.

Duration: 15:00	Duration: 15:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- State safety and health policies to be followed at the workplace. - Explain the company's emergency evacuation procedure. - Describe how to handle hazardous material. - Describe how to operate hazardous tools and equipment. - Describe emergency procedures to be followed in case of emergencies.	- Display the correct way of handling electrical equipment. - Demonstrate the use of safety materials such as gloves, goggles, masks, helmets, etc. - Display the correct way of handling material to avoid any damage and injuries. - Demonstrate the administration of basic first aid.
Classroom Aids:	
Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator's Guide, Participant's Handbook.	
Tools, Equipment and Other Requirements	
Personal Protective Equipment, cleaning equipment and materials, sanitiser, soap, mask	

Module 7: 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*	
Diploma	Electrical, Electronics, Civil, Mechanical, Fitter, Instrumentation, Agriculture engineering	3	Pump Technician	0		
I.T. I	Electrical, Electronics, Civil, Mechanical, Fitter, Instrumentation	3	Pump Technician	0		
B. Tech. / BE	Civil/Mechanical/ Electrical/ Instrumentation /Electronics /Electrical and Electronics Eng./ Agriculture engineering.	2	Pump Technician	0		For the school Program minimum qualification of the Trainer should be Graduate (Agriculture/ Physics). Their Teaching experience will be considered industry experience
Certificate	CITS Pass- Electrician & Wireman Certificate	1	Pump Technician	0		
M.Tech.	Civil/ Mechanical/ Electrical/ Instrumentation /Electronics/ Electrical and Electronics Eng./ Agriculture engineering	0	Pump Technician	0		

Trainer Certification	
Domain Certification	**Platform Certification**
Certified for Job Role "Solar Pump Technician", mapped to QP: "AGR/Q6701, 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. Tech/ B.E	Agriculture/ Agriculture Engineering/ Instrumentation/ Electrical & Electronics Engineering	5	Agriculture/ Agriculture Engineering/ Instrumentation/ Electrical & Electronics Engineering	0		Practical skills and knowledge required in installation and construction of solar pump components
B.Sc.	Agriculture / Agriculture Engineering/and related streams	5	Agriculture/ Agriculture Engineering/ Instrumentation/ Electrical & Electronics Engineering	0		Practical skills and knowledge required in installation and construction of solar pump components
M. Tech	Agriculture/ Agriculture Engineering/ Instrumentation/ Electrical & Electronics Engineering	2	Agriculture/ Agriculture Engineering/ Instrumentation/ Electrical & Electronics Engineering	0		Practical skills and knowledge required in installation and construction of solar pump components
M.Sc.	Agriculture / Agriculture Engineering and related streams	2	Agriculture/ Agriculture Engineering/ Instrumentation/ Electrical & Electronics Engineering	0		Practical skills and knowledge required in installation and construction of solar pump components
PhD	Agriculture/ Agriculture Engineering/ Instrumentation/ Electrical & Electronics Engineering	1	Agriculture/ Agriculture Engineering/ Instrumentation/ Electrical &	0		Practical skills and knowledge required in installation and

		Electronics Engineering			construction of solar pump components

Assessor Certification	
Domain Certification	**Platform Certification**
"**Solar Pump Technician**", "AGR/Q6701, 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 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 the ground through qualified and ToA certified assessors.

While it is important that an individual has adequate knowledge and skills to perform a specific task, weightage for different aspects of 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 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 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 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 the same day. In case of more number of candidates, the 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 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 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 standardization of the marking scheme.

Type of Evidence and Evidence Gathering Protocol:

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

- Geo Tagging 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 tool to conduct the training and assessment
  - Pictures and videos of Assessment, training feedback and infrastructure.
- Apart from the Assessor, a 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 the assessment, regular calls and video calls are done.
- On-boarding and training of assessor and proctor is 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 has 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 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 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 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 candidate shall be stored and available for review (retained for 5 years/ till the conclusion of the project or scheme)

References

Glossary

Term	Description
Sector	Sector is a conglomeration of different business operations having similar business and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests
Key Learning	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).
OJT (M)	On-the-job training (Mandatory); trainees are mandated to complete specified hours of training on site
OJT (R)	On-the-job training (Recommended); trainees are recommended the specified hours of training on site
Procedural Knowledge	Procedural knowledge addresses how to do something, or how to perform a
Training Outcome	Training outcome is a statement of what a learner will know, understand and be able to do upon the completion of the training.
Terminal Outcome	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
NOS	National Occupational Standard (s)
NSQF	National Skills Qualifications Framework
OJT	On-the-job Training
QP	Qualifications Pack
PwD	People with Disability
PPE	Personal Protective Equipment