



QP Name: Agriculture Machinery Demonstrator

QP Code: AGR/Q1107

Version: 3.0

NSQF Level: 5

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

Table of Contents

Training Parameters.....	3
Program Overview	5
Training Outcomes.....	5
Compulsory Modules.....	5
Module 1: Introduction to the role of an Agriculture Machinery Demonstrator	7
Module 2: Preparation for training and demonstration.....	8
Module 3: Functions and operations of various agricultural machineries and implements.....	9
Module 4: Demonstration and supervision of repair and maintenance of agricultural machineries and implements	10
Module 5: Hygiene and cleanliness	11
Module 6: Safety and emergency procedures.....	12
Module 7: Employability Skills (90 hours).....	13
Module 8: On-the-Job Training.....	15
Annexure.....	16
Trainer Requirements	16
Assessor Requirements.....	18
Assessment Strategy.....	19
References	24
Glossary.....	24
Acronyms and Abbreviations.....	25

Training Parameters

Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Farm Machinery, Equipment Operation and Maintenance
Country	India
NSQF Level	5
Aligned to NCO/ISCO/ISIC Code	NCO-2015/NIL
Minimum Educational Qualification and Experience	<p>Minimum Educational Qualification: Completed 2nd year of UG OR Pursuing 2nd year of UG and continuous education OR Completed 2nd year of diploma (after 12th) OR Pursuing 2nd year of 2-year diploma after 12th OR 12th pass with 1-year Vocational Education & training (NTC or NAC or CITS) OR Completed 3-year diploma after 10th with 1- year relevant experience OR 12th Grade pass with 2- year relevant experience OR 10th Grade pass with 4-year relevant experience OR Previous relevant Qualification of NSQF Level 4 and with minimum education as 8th Grade pass with 3-year relevant experience OR Previous relevant Qualification of NSQF Level 4.5 with 1.5- year relevant experience</p>
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years
Last Reviewed On	27/01/2022
Next Review Date	27/01/2025
NSQC Approval Date	27/01/2022
QP Version	3.0

Model Curriculum Creation Date	27/01/2022
Model Curriculum Valid Up to Date	27/01/2025
Model Curriculum Version	2.0
Minimum Duration of the Course	480 Hours
Maximum Duration of the Course	480 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:

- Describe the process of preparing for training and demonstration of various agriculture machineries.
- Demonstrate the operation of various farm machineries and implements.
- Demonstrate the process of repairing and maintaining various agricultural machineries and implements.
- Describe the process of undertaking employability and entrepreneurial practices.
- Explain the importance of following the recommended inclusive practices for Persons with Disabilities (PwD) and all genders at work.
- Demonstrate various practices to maintain personal hygiene, cleanliness, and safety at the work.

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
Bridge Module	05:00	00:00	0:00	00:00	05:00
Module 1: Introduction to the role of an Agriculture Machinery Demonstrator	05:00	00:00	0:00	00:00	05:00
AGR/N1123 Prepare for training and demonstration NOS Version- 2.0 NSQF Level-5	35:00	50:00	0:00	00:00	85:00
Module 2: Preparation for training and demonstration	35:00	50:00	0:00	00:00	85:00
AGR/N1124 Demonstrate the operation of various farm machineries and implements NOS Version- 2.0 NSQF Level-5	30:00	60:00	0:00	00:00	90:00
Module 3: Functions and operations of various	30:00	60:00	0:00	00:00	90:00

agricultural machineries and implements					
AGR/N1125 Demonstrate and supervise the repair and maintenance of agricultural machineries and implements NOS Version- 2.0 NSQF Level-4	30:00	60:00	0:00	00:00	90:00
Module 4: Demonstration and supervision of repair and maintenance of agricultural machineries and implements	30:00	60:00	0:00	00:00	90:00
AGR/N9903 Maintain health and safety at the workplace NOS Version- 3.0 NSQF Level-4	20:00	10:00	0:00	00:00	30:00
Module 5: Hygiene and cleanliness	03:00	03:00	0:00	00:00	06:00
Module 6: Safety and emergency procedures	17:00	07:00	0:00	00:00	24:00
DGT/VSQ/N0103 Employability Skills NOS Version-1.0 NSQF Level-5	90:00	00:00	0:00	0:00	90:00
Module 7: Employability Skills	90:00	00:00	0:00	0:00	90:00
Total Duration	210:00	180:00	0:00	0:00	390:00
OJT: 90 hours					

Module Details

Module 1: Introduction to the role of an Agriculture Machinery Demonstrator

Bridge Module

Terminal Outcomes:

- Discuss the job role of an Agriculture Machinery Demonstrator.

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

Module 2: Preparation for training and demonstration

Mapped to AGR/N1123 v2.0

Terminal Outcomes:

- Describe the process of preparing for participating in training programs.
- Explain the importance of using various aids and equipment for demonstration.

Duration: 35:00	Duration: 50:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Describe the process of identifying the target audience and relevant training programs. • Describe the process for participating in training programs as a demonstrator. • List various equipment and aid required for the demonstration of agricultural machineries such as operator's and service manuals, audio-visual aids, Personal Protective Equipment (PPE). • Explain the importance of audio-visual aids in a demonstration. • List various sources to get information about the latest developments in the field of agricultural machineries. 	<ul style="list-style-type: none"> • Prepare a sample checklist of agricultural machineries to be demonstrated. • Prepare a sample training or demonstration calendar along with a schedule according to the training programs.
Classroom Aids	
Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop	
Tools, Equipment and Other Requirements	
Video of Tractors, Power Tillers, Engine and Electric Motors and their Systems, Disc Plough, Disc Harrow, Cultivators, Seed Drills, Sprayers and Duster	

Module 3: Functions and operations of various agricultural machineries and implements

Mapped to ARG/N1124 v2.0

Terminal Outcomes:

- Describe the functions of various farm machineries and implements.
- Demonstrate the process of operating various agricultural machineries and implements.
- Demonstrate the use of relevant PPE.
- Demonstrate various practices for effective resource optimisation.

Duration: 30:00	Duration: 60:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Explain the applicable laws and regulations governing the use of agricultural machineries and implements. • Explain the design and operation of various farm machineries and implements. • Explain the key considerations in selecting specific agricultural machinery or implement for farm operations. • Explain the Standard Operating Procedure (SOP) for the demonstration of various farm machinery. • Explain the design and operation of various irrigation and water lifting systems. • Explain the design and operation of various post-harvest machineries such as thresher, cleaner, grader, dryer, etc. • Describe the process of operating various attachments used with farm machineries. • Explain various hazards associated with the use of farm machineries and implements. • Describe the process of dealing with any farm emergencies or accidents. • Explain the benefits of resource optimisation. 	<ul style="list-style-type: none"> • Show how to operate various agricultural machineries and implements used in preparing farm, sowing, inter-cultural operations, harvesting and post-harvest processing. • Demonstrate the use of various attachments used with farm machineries. • Demonstrate the use of various irrigation systems. • Show how to use the relevant PPE correctly during the operation, repair and maintenance of agricultural machineries and implements. • Demonstrate various practices to optimise the usage of various resources such as water and electricity.
Classroom Aids	
Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop	
Tools, Equipment and Other Requirements	
Fishing wire, Point Marking Sticks, Marking Powder or Whitewash Powder, Poster Stand, Chart Stand, Mike, Sound System, Flex Banner, Pamphlets, Reapers and Threshers, Rice Transplanting Machineries, Water Lifting Devices	

Module 4: Demonstration and supervision of repair and maintenance of agricultural machineries and implements

Mapped to AGR/N1125 v2.0

Terminal Outcomes:

- Describe the process of demonstrating and supervising the repair and maintenance process.
- Demonstrate various waste management practices.

Duration: 30:00	Duration: 60:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Explain the importance of carrying out regular repair and maintenance of different agricultural machineries and implements. • List the relevant repair and maintenance tools and equipment. • Explain the use of various repair and maintenance tools and equipment. • Describe the process of detecting faults in different agricultural machineries and implements. • Describe the process of carrying out minor repairs of agricultural machinery and implements. • Describe the process of making adjustments to different agricultural machineries and implements. • Explain the importance of recycling and disposing different types of waste as per the applicable regulations. • Explain the criteria for segregating waste into appropriate categories. 	<ul style="list-style-type: none"> • Demonstrate the process of supervising the farmers about the use of relevant repair and maintenance tools and equipment. • Show how to supervise the farmers about the process of detecting faults in different agricultural machineries and implements. • Demonstrate the process of supervising the farmers about the repair and maintenance process of various farm machineries and implements. • Show how to make relevant adjustments to various farm machineries and implements. • Demonstrate the process of recycling and disposing different types of waste appropriately.
Classroom Aids	
Training Kit (Trainer Guide, Presentations)	
Tools, Equipment and Other Requirements	
Fishing Wire, Point Marking Sticks, Marking Powder or Whitewash Powder, Tractors, Power Tillers, Engine and Electric Motors and their Systems, Rice Transplanting Machineries, Water Lifting Devices	

Module 5: Hygiene and cleanliness

Mapped to NOS AGR/N9903 v2.0

Terminal Outcomes:

- Discuss how to adhere to personal hygiene practices
- Demonstrate ways to ensure cleanliness around the workplace

Duration: 03:00	Duration: 03:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Explain the requirements of personal health, hygiene and fitness at work. • Describe common health-related guidelines laid down by the organizations/ Government at the workplace • Explain the importance of good housekeeping at the workplace. • Explain the importance of informing the designated authority on personal health issues related to injuries and infectious diseases. 	<ul style="list-style-type: none"> • Demonstrate personal hygiene practices to be followed at the workplace. • Demonstrate the correct way of washing hands using soap and water, and alcohol-based hand rubs. • Demonstrate the steps to follow to put on and take off a mask safely. • Show how to sanitize and disinfect one's work area regularly. • Demonstrate adherence to the workplace sanitization norms. • Show how to ensure the cleanliness of the work area.
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, Sanitizer, Soap, Mask	

Module 6: Safety and emergency procedures

Mapped to NOS AGR/N9903 v3.0

Terminal Outcomes:

- Describe how to adhere to safety guidelines
- Show how to administer appropriate emergency procedures

Duration: 17:00	Duration: 07:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • List the Personal Protective Equipment (PPE) required at the workplace. • Describe the commonly reported hazards at the workplace. • Describe the hazards caused due to chemicals/pesticides/fumigants. • Describe the basic safety checks to be done before the operation of any equipment/machinery. • Describe the common first aid procedures to be followed in case of emergencies. • State measures that can be taken to prevent accidents and damage s at the workplace. • Explain the importance of reporting details of first aid administered, to the reporting officer/doctor, in accordance with workplace procedures • State common health and safety guidelines to be followed at the workplace. 	<ul style="list-style-type: none"> • Check various areas of the workplace for leakages, water-logging, pests, fire, etc. • Demonstrate how to safely use the PPE and implements as applicable to the workplace. • Display the correct way of donning, doffing and discarding PPE such as face masks, hand gloves, face shields, PPE suits, etc. • Sanitize the tools, equipment and machinery properly. • Demonstrate the safe disposal of waste. • Demonstrate procedures for dealing with accidents, fires and emergencies. • Demonstrate emergency procedures to the given workplace requirements. • Demonstrate the use of emergency equipment in accordance with manufacturers' specifications and workplace requirements. • Demonstrate the administration of first aid. • Prepare a list of relevant hotline/emergency numbers
Classroom Aids:	
Computer, Projection Equipment, PowerPoint Presentation and Software, Facilitator's Guide, Participant's Handbook.	
Tools, Equipment and Other Requirements	
Personal Protective Equipment, First Aid Kit, Equipment used in Medical Emergencies.	

Module 7: Employability Skills (90 hours)

Mapped to NOS DGT/VSQ/N0103 v1.0

Duration: 90:00

Key Learning Outcomes

Introduction to Employability Skills Duration: 3 Hours

After completing this programme, participants will be able to:

1. Outline the importance of Employability Skills for the current job market and future of work
2. List different learning and employability related GOI and private portals and their usage
3. Research and prepare a note on different industries, trends, required skills and the available opportunities

Constitutional values - Citizenship Duration: 1.5 Hours

4. 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
5. Demonstrate how to practice different environmentally sustainable practices

Becoming a Professional in the 21st Century Duration: 5 Hours

6. Discuss relevant 21st century skills required for employment
7. Highlight the importance of practicing 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
8. Create a pathway for adopting a continuous learning mindset for personal and professional development

Basic English Skills Duration: 10 Hours

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

Career Development & Goal Setting Duration: 4 Hours

12. Create a career development plan
13. Identify well-defined short- and long-term goals

Communication Skills Duration: 10 Hours

14. Demonstrate how to communicate effectively using verbal and nonverbal communication etiquette
15. Write a brief note/paragraph on a familiar topic
16. Explain the importance of communication etiquette including active listening for effective communication
17. Role play a situation on how to work collaboratively with others in a team

Diversity and Inclusion Duration: 2.5 Hours

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

Financial and Legal Literacy Duration: 10 Hours

20. Discuss various financial institutions, products, and services
21. Demonstrate how to conduct offline and online financial transactions, safely and securely and check passbook/statement
22. Explain the common components of salary such as Basic, PF, Allowances (HRA, TA, DA, etc.), tax deductions
23. Calculate income and expenditure for budgeting
24. Discuss the legal rights, laws, and aids

Essential Digital Skills Duration: 20 Hours

25. Describe the role of digital technology in day-to-day life and the workplace
26. Demonstrate how to operate digital devices and use the associated applications and features, safely and securely
27. Demonstrate how to connect devices securely to internet using different means
28. Follow the dos and don'ts of cyber security to protect against cyber crimes
29. Discuss the significance of displaying responsible online behavior while using various social media platforms
30. Create an e-mail id and follow e-mail etiquette to exchange e-mails
31. Show how to create documents, spreadsheets and presentations using appropriate applications
32. utilize virtual collaboration tools to work effectively

Entrepreneurship Duration: 7 Hours

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

Customer Service Duration: 9 Hours

37. Classify different types of customers
38. Demonstrate how to identify customer needs and respond to them in a professional manner
39. Discuss various tools used to collect customer feedback
40. Discuss the significance of maintaining hygiene and dressing appropriately

Getting ready for apprenticeship & Jobs Duration: 8 Hours

41. Draft a professional Curriculum Vitae (CV)
42. Use various offline and online job search sources to find and apply for jobs
43. Discuss the significance of maintaining hygiene and dressing appropriately for an interview
44. Role play a mock interview
45. List the steps for searching and registering for apprenticeship opportunities

Module 8: On-the-Job Training

Mapped to Agriculture Machinery Demonstrator

Mandatory Duration: 90:00	Recommended Duration: 00:00
Location: On Site	
<p>Terminal Outcomes</p> <ol style="list-style-type: none"> 1. Explain the process of identifying the target audience and relevant training programs. 2. Explain the process for participating in training programs as a demonstrator. 3. Prepare checklist of agricultural machineries to be demonstrated. 4. Prepare training or demonstration calendar along with a schedule according to the training programs. 5. Explain the design and operation of various farm machineries and implements. 6. Supervise the farmers about the use of relevant repair and maintenance tools and equipment. 7. Supervise the farmers about the process of detecting faults in different agricultural machineries and implements. 8. Carry out commercial activities such as buying and selling commodities using the appropriate e-commerce platforms. 9. Process payments using the relevant e-payment method. 10. Prepare training schedule for an apprentice. 11. Explain the requirements of personal health, hygiene and fitness at work. 12. Implement the practices related to gender and PwD sensitization. 	

Annexure

Trainer Requirements

Trainer Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training Experience		Remarks
		Years	Specialization	Years	Specialization	
12th Class	Class 12th with Science and having any Certificate in course in Farm Mechanization from recognized institutes	5	Agriculture farm Machinery	0		Ex-Service-Man including Ex-Paramilitary personnel: Minimum Qualification is 10+2 with an Honourable Discharge/Pension. SC would consider a relaxation/waiver of sector-specific experience on a case-to-case basis.
Diploma	Mechanical / Agriculture engineering	3	Agriculture Farm Machinery	0		
ITI	Mechanical / Agriculture engineering	3	Agriculture Farm Machinery	0		
Graduate		3	Agriculture Farm Machinery	0		For the school Program minimum qualification of the Trainer should be Graduate (Agriculture / Physics). Their Teaching experience will be considered industry experience
Certificate	NCIC-Mechanics Agriculture Machinery certificate	1	Agriculture farm Machinery			
Graduate	Agriculture / Horticulture / Botany/Forestry)	1	Agriculture farm Machinery	0		
B. Tech	Mechanical / Agriculture engineering.	0		0		

Trainer Certification	
Domain Certification	Platform Certification
<p>Certified for Job Role “Agriculture Machinery Demonstrator”, mapped to QP: “AGR/Q1107, v3.0”, Minimum accepted score is 80%</p>	<p>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%.</p>

Assessor Requirements

Assessor Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training/Assessment Experience		Remarks
		Years	Specialization	Years	Specialization	
Graduation	B. Tech(B. Tech(Agriculture / Agriculture Engineering / Mechanical Engineering / Farm Machinery	5	Agriculture / Farm Machinery / Mechanical Engineering and related streams	0		Practical skills and knowledge required in Agriculture Machine operations
Graduation	B.Sc.(Agriculture / Agriculture Engineering and related streams	5	Agriculture / Farm Machinery / Mechanical Engineering and related streams	0		Practical skills and knowledge required in Agriculture Machine operations
Post-Graduation	M. Tech(Agriculture / Agriculture Engineering / Mechanical Engineering / Farm Machinery	2	Agriculture / Farm Machinery / Mechanical Engineering and related streams	0		Practical skills and knowledge required in Agriculture Machine operations
Post-Graduation	M.Sc.(Agriculture / Agriculture Engineering and related streams	2	Agriculture / Farm Machinery / Mechanical Engineering and related streams	0		Practical skills and knowledge required in Agriculture Machine operations
PhD	PhD(Agriculture / Agriculture Engineering/Farm engineering and related streams	1	Agriculture / Farm Machinery / Mechanical Engineering and related streams	0		Practical skills and knowledge required in Agriculture Machine operations

Assessor Certification	
Domain Certification	Platform Certification
<p>“Agriculture Machinery Demonstrator”, “AGR/Q1107, v3.0”, Minimum accepted score is 80%</p>	<p>Certified for the Job Role: “Assessor (Vet and Skills)”, mapped to the Qualification Pack: “MEP/Q2701, v2.0”, with a minimum score of 80%.</p>

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 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 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

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 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 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 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 to 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	The 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
Declarative Knowledge	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.
Key Learning Outcome	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 task. It is the ability to work, or produce a tangible work output by applying cognitive, affective or psychomotor skills.
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