



Model Curriculum

QP Name: Coffee Plantation Worker

QP Code: AGR/Q0501

Version: 3.0

NSQF Level: 3

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

Sector	Agriculture
Sub-Sector	Agriculture Crop production
Occupation	Plantation Crops Cultivation
Country	India
NSQF Level	3
Aligned to NCO/ISCO/ISIC Code	NCO-2015/6112.0601
Minimum Educational Qualification and Experience	8th Class Pass with 1 year of relevant experience OR 8th Class Pass and pursuing continuous regular schooling OR 5th Class Pass with 4 years of relevant experience OR Ability to read and write with 5 years of relevant experience OR Previous relevant Qualification of NSQF Level 3 with 6 Months of relevant experience OR Previous relevant Qualification of NSQF Level 2 with 1 year of relevant experience
Pre-Requisite License or Training	NA
Minimum Job Entry Age	17 Years
Last Reviewed On	17/11/2022
Next Review Date	31/03/2025
NSQC Approval Date	31/03/2022
QP Version	3.0
Model Curriculum Creation Date	31/03/2022
Model Curriculum Valid Up to Date	31/03/2025
Model Curriculum Version	2.0
Minimum Duration of the Course	270 Hours
Maximum Duration of the Course	270 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:

- Demonstrate the process of assisting in raising coffee saplings in the nursery.
- Demonstrate the process of assisting in preparing the field and transplanting the coffee saplings.
- Describe the process of assisting in maintaining the coffee crop.
- Demonstrate the process of assisting in harvesting and post-harvest processing of coffee crop.
- Explain the basic entrepreneurial activities for small enterprise.
- 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
AGR/N0501 Assist in raising coffee saplings in the nursery NOS Version- 2.0 NSQF Level- 3	20:00	40:00	0:00	0:00	60:00
Module 1: Introduction to the role of a Coffee Plantation Worker	05:00	0:00	0:00	0:00	05:00
Module 2: Process of assisting in raising coffee saplings in the nursery	15:00	40:00	0:00	0:00	55:00
AGR/N0502 Assist in preparing the field and transplanting the coffee saplings NOS Version- 2.0 NSQF Level- 3	10:00	20:00	0:00	0:00	30:00
Module 3: Process of assisting in preparing the field and transplanting the coffee saplings	10:00	20:00	0:00	0:00	30:00

AGR/N0503 Assist in maintaining the coffee crop NOS Version-3.0 NSQF Level- 3	20:00	40:00	0:00	0:00	60:00
Module 4: Process of assisting in maintaining the coffee crop	20:00	40:00	0:00	0:00	60:00
AGR/N0507 Assist in harvesting and post-harvest processing of coffee crop NOS Version-2.0 NSQF Level- 3	20:00	40:00	0:00	0:00	60:00
Module 5: Process of assisting in harvesting and post-harvest processing of coffee crop	20:00	40:00	0:00	0:00	60:00
AGR/N9903 Maintain health and safety at the workplace NOS Version- 4.0 NSQF Level-4	20:00	10:00	0:00	0:00	30:00
Module 6: Hygiene and cleanliness	03:00	03:00	0:00	0:00	6:00
Module 7: Safety and emergency procedures	17:00	07:00	0:00	0:00	24:00
DGT/VSQ/N0101 Employability Skills NOS Version-1.0 NSQF Level-2	30:00	00:00	0:00	0:00	30:00
Module 8: Employability Skills	30:00	00:00	0:00	0:00	30:00
Total Duration	120:00	150:00	0:00	0:00	270:00

Module Details

Module 1: Introduction to the role of a Coffee Plantation Worker

Bridge Module, Mapped to AGR/N0501 v2.0

Terminal Outcomes:

- Discuss the job role of a Coffee Plantation Worker.

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 a Coffee Plantation Worker. • Identify various employment opportunities for a Coffee Plantation Worker. 	
Classroom Aids	
Training Kit - Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop, Video Films	
Tools, Equipment and Other Requirements	
NA	

Module 2: Process of assisting in raising coffee saplings in the nursery

Mapped to AGR/N0501 v2.0

Terminal Outcomes:

- Describe the process of assisting in preparing the coffee seeds.
- Demonstrate the process of assisting in raising saplings in the nursery.

Duration: 15:00	Duration: 40:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Explain how to select healthy and mature seed bearer plants for extracting coffee seeds. • Explain the importance of selecting fully-developed and ripe berries for extracting coffee seeds. • Describe the process of extracting coffee seeds from berries, preparing them and treating them. • Explain the importance and process of detecting the presence of nematodes in the soil and using the appropriate treatment to remove them. • Explain the importance and ways of ensuring effective drainage and aeration in the nursery bed. • Explain the importance of using quality water for irrigation of the nursery bed and providing shade to protect it from direct sunlight. • State the recommended depth and density required to be maintained while sowing the seeds. • Explain the recommended practices to be followed to protect the saplings from pests, disease and fluctuations in temperature. • Describe various different organic methods for the cultivation of coffee saplings. • State the the recommended temperature and duration for harvesting and acclimatising coffee saplings. • State the recommended temperature 	<ul style="list-style-type: none"> • Demonstrate the process of harvesting fully-developed and ripe berries from the seed bearers. • Demonstrate the process of removing the berry floats and pulp manually or mechanically as per the supervisor's instructions. • Show how to sieve the berries and mix them with sieved wood ash. • Demonstrate the process of grading the seeds as per the supervisor's instructions and removing all cut, triangular and elephant beans. • Demonstrate the process of treating the seeds with the recommended organomercurial fungicide to prevent fungal infection. • Demonstrate the process of applying the treatment recommended by the lab to remove nematodes from the soil. • Demonstrate the process of carrying out soil solarisation as per the instructions. • Demonstrate the process of preparing the nursery bed or a polybag bed for raising seedlings. • Show how to mix the recommended quantity of coarse sand in the soil as per the supervisor's instructions. • Demonstrate the process of sowing the coffee seeds at the recommended depth and density. • Demonstrate the process of harvesting and acclimatising the saplings for being transplanted into

and humidity for storing the harvested seedlings.	the field.
Classroom Aids	
Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop	
Tools, Equipment and Other Requirements	
NA	

Module 3: Process of assisting in preparing the field and transplanting the coffee saplings

Mapped to ARG/N0502 v2.0

Terminal Outcomes:

- Describe the process of assisting in preparing the field for transplantation.
- Demonstrate the process of assisting in transplanting the saplings.

Duration: 10:00	Duration: 20:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Describe the process of clearing, ploughing and harrowing the field, and their influence on the soil tilth. • Explain the use of various farm machineries for preparing the field for transplanting coffee saplings. • Explain the importance of applying the recommended fertilisers to the soil during field preparation and allowing the nutrients to be absorbed before transplanting the saplings. • Explain the importance of creating draining conduits in the coffee field. • Explain the importance of arranging shading in the field to maintain the recommended temperature and soil moisture for the optimum growth of the coffee crop. • Describe the process of transplanting coffee seedlings and the immediate care they need. • Explain the common challenges experienced while transplanting coffee saplings and how to overcome them. • State the recommended planting density to be maintained in the coffee plantation. 	<ul style="list-style-type: none"> • Demonstrate how to remove any debris, waste and weeds from the coffee field. • Demonstrate the process of carrying out ploughing and harrowing in the field as per the supervisor's instructions to achieve the recommended tilth. • Demonstrate the process of applying the recommended fertilisers in the appropriate quantity to supplement the required macro and micronutrients. • Demonstrate the process of carrying out liming of the field soil as per the supervisor's instructions to achieve the required pH levels. • Demonstrate the process of installing the appropriate irrigation or fertigation system. • Show how to create draining conduits as per the supervisor's instructions. • Show how to drain out any stagnant water from the field to prevent rotting in the seedlings. • Demonstrate the process of preparing pits in the field as per the supervisor's instructions for transplanting saplings. • Demonstrate the process of transplanting the coffee seedlings, maintaining the planting density recommended for the selected coffee variety and field's topography. • Demonstrate the process of applying

	<p>the recommended organic or inorganic fertilisers to the saplings as per the supervisor’s instructions.</p> <ul style="list-style-type: none"> • Demonstrate the process of applying mulch around the roots of the saplings to preserve the soil moisture and prevent weed growth.
<p>Classroom Aids</p>	
<p>Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop</p>	
<p>Tools, Equipment and Other Requirements</p>	
<p>NA</p>	

Module 4: Process of assisting in maintaining the coffee crop

Mapped to AGR/N0503 v3.0

Terminal Outcomes:

- Describe the process of assisting in irrigation management.
- Describe the process of assisting in nutrient, pest and disease management.
- Demonstrate the process of assisting in weeding, pruning and training.
- Demonstrate various practices for effective resource optimisation.
- Demonstrate various waste management practices.
- Discuss ways to promote diversity and inclusion at the workplace.

Duration: 20:00	Duration: 40:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Describe the process of sampling and testing the soil. • Explain the use of relevant equipment for appropriate intercultural operations, such as a foliar spray for spraying fertilisers. • Explain the importance of checking the coffee crop regularly to identify the signs of pest and disease infestation. • State the recommended irrigation schedule for the coffee crop. • Explain the practice of intercropping to promote the healthy growth of coffee plants. • Explain the safe usage of the recommended herbicides and weedicides and the appropriate time for their application during the coffee crop life cycle. • Explain the benefits of resource optimisation. • Explain the importance of recycling and disposing different types of waste as per the applicable regulations. • Explain the importance of inclusion of all genders and People with Disability (PwD) at the workplace. 	<ul style="list-style-type: none"> • Demonstrate how to irrigate the coffee plants with an appropriate quantity of water. • Demonstrate the process of carrying out regular maintenance of the irrigation and drainage channels. • Show how to drain out excess water from the field to ensure no waterlogging. • Demonstrate the process of applying fertilisers to coffee plants using foliar spray and as per the supervisor's instructions. • Demonstrate the process of applying the recommended treatment as per the Integrated Pest Management (IPM) practices and supervisor's instructions. • Demonstrate the process of carrying out mulching as per the supervisor's instructions to prevent the growth of weeds. • Demonstrate the process of carrying out digging, forking and removing weeds from the field as per the supervisor's instructions. • Demonstrate the process of applying the recommended herbicides and weedicides as per instructions. • Demonstrate the process of carrying out pruning of the coffee plants to remove dead and infested leaves and

	<p>branches.</p> <ul style="list-style-type: none"> • Show how to train the coffee plants to ensure their desired growth. • Demonstrate various practices to optimise the usage of various resources such as water and electricity. • Demonstrate the process of recycling and disposing different types of waste appropriately. • Demonstrate appropriate verbal and non-verbal communication that is respectful of genders and disability.
<p>Classroom Aids</p>	
<p>Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop</p>	
<p>Tools, Equipment and Other Requirements</p>	
<p>NA</p>	

Module 5: Process of assisting in harvesting and post-harvest management of coffee crop

Mapped to NOS AGR/N0507 v2.0

Terminal Outcomes:

- Demonstrate the process of assisting in harvesting the cherries.
- Demonstrate the process of assisting in carrying out post-harvest management.

Duration: 20:00	Duration: 40:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Explain the indicators of the maturity of cherries on coffee plants. • Explain the use of the relevant tools and equipment for harvesting cherries. • Describe the process of mechanical and manual harvesting of coffee cherries. • Explain the difference between strip picking and selective picking. • Describe the process of drying the harvested cherries under the sun or mechanically. • Explain how to carry out pulping of cherries to obtain the coffee beans and cleaning them. • Explain the applicable parameters for sorting the coffee beans such as variety and organoleptic properties. • Describe the process of grading the coffee beans using a rotating sieve, according to the shape and size. • State the appropriate packing material to be used to pack coffee beans to protect them from moisture. • State the recommended treatment to be applied in the storage to remove pests and insects. • Explain the importance of storing the packed coffee beans in a dry and hygienic storage area, ensuring good ventilation. • Describe the correct method of 	<ul style="list-style-type: none"> • Demonstrate the process of carrying out mechanical or manual harvesting of cherries, following the strip picking or selective picking method as per the supervisor's instructions. • Show how to dry the harvested cherries mechanically using a hot air dryer as per the supervisor's instructions. • Demonstrate the process of carrying out pulping of cherries to obtain the coffee beans and clean the beans as per instructions. • Show how to sort the coffee beans on appropriate parameters. • Show how to grade the coffee beans based on shape and size with the help of a rotating sieve. • Demonstrate the process of packing the coffee beans in air-tight packing, protecting them from moisture. • Demonstrate the process of applying the recommended treatment in the storage to remove pests and insects. • Prepare a sample manual and/ or electronic record of coffee beans processed and transported using the physical registers and/ or the relevant computer application.

loading the packed beans in the transport vehicle, ensuring their protection from damage.	
Classroom Aids:	
Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop	
Tools, Equipment and Other Requirements	
NA	

Module 6: Hygiene and cleanliness

Mapped to NOS AGR/N9903 v4.0

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 7: Safety and emergency procedures

Mapped to NOS AGR/N9903 v4.0

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 damages 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 it 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 8: Employability Skills (30 hours)

Mapped to NOS DGT/VSQ/N0101 v1.0

Duration: 30:00

Key Learning Outcomes

Introduction to Employability Skills Duration: 1 Hour

After completing this programme, participants will be able to:

1. Discuss the importance of Employability Skills in meeting the job requirements

Constitutional values - Citizenship Duration: 1 Hour

2. Explain constitutional values, civic rights, duties, citizenship, responsibility towards society etc. that are required to be followed to become a responsible citizen.
3. Show how to practice different environmentally sustainable practices

Becoming a Professional in the 21st Century Duration: 1 Hours

4. Discuss 21st century skills.
5. Display positive attitude, self -motivation, problem solving, time management skills and continuous learning mindset in different situations.

Basic English Skills Duration: 2 Hours

6. Use appropriate basic English sentences/phrases while speaking

Communication Skills Duration: 4 Hour

7. Demonstrate how to communicate in a well -mannered way with others.
8. Demonstrate working with others in a team

Diversity & Inclusion Duration: 1 Hour

9. Show how to conduct oneself appropriately with all genders and PwD
10. Discuss the significance of reporting sexual harassment issues in time

Financial and Legal Literacy Duration: 4 Hours

11. Discuss the significance of using financial products and services safely and securely.
12. Explain the importance of managing expenses, income, and savings.
13. Explain the significance of approaching the concerned authorities in time for any exploitation as per legal rights and laws

Essential Digital Skills Duration: 3 Hours

14. Show how to operate digital devices and use the associated applications and features, safely and securely
15. Discuss the significance of using internet for browsing, accessing social media platforms, safely and securely

Entrepreneurship Duration: 7 Hours

16. Discuss the need for identifying opportunities for potential business, sources for arranging money and potential legal and financial challenges

Customer Service Duration: 4 Hours

17. Differentiate between types of customers
18. Explain the significance of identifying customer needs and addressing them
19. Discuss the significance of maintaining hygiene and dressing appropriately

Getting ready for apprenticeship & Jobs Duration: 2 Hours

20. Create a biodata
21. Use various sources to search and apply for jobs
22. Discuss the significance of dressing up neatly and maintaining hygiene for an interview
23. Discuss how to search and register for apprenticeship opportunities

Annexure

Trainer Requirements

Trainer Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training Experience		Remarks
		Years	Specialization	Years	Specialization	
10th Class		7	Coffee Plantation	0		Coffee Plantation Worker with 7 Years of experience working with registered Tea plantation after 10th Pass
12th Class		4	Coffee Plantation	0		Ex-Service-Man including Ex-Paramilitary personnel: Minimum Qualification is 10+2 with an Honourable Discharge/ Pension. SSC would consider a relaxation/ waiver of sector-specific experience on a case-to-case basis.
Diploma	Agriculture/ Horticulture	3	Coffee Plantation	0		
Graduate	Graduate in any stream except Agriculture/ Horticulture/ Botany/ Tea Husbandry/ Technology	2	Coffee Plantation			For the school Program minimum qualification of the Trainer should be Graduate (Agriculture/ Horticulture/ Botany) with minimum 3 years Teaching experience (will be considered industry experience
Graduate	Agriculture / Horticulture/ Forestry	0		0		
Post-Graduate	Agriculture / Horticulture/ Botany /Forestry	0		0		

Trainer Certification	
Domain Certification	Platform Certification
Certified for Job Role “ Coffee Plantation Worker ”, mapped to QP: “AGR/Q0501, 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.Sc	Agriculture/ Botany/ Forestry/ Plantation Horticulture and other related streams	5	Horticulture/Plantation/Forestry/Horticulture and related streams	0		Practical skills and knowledge required in Coffee Plantation
M.Sc	Agriculture/ Botany/ Forestry/ Plantation Horticulture and other related streams	2	Horticulture/Plantation/Forestry/Horticulture and related streams	0		Practical skills and knowledge required in Coffee Plantation
PhD	Agriculture/ Botany/ Forestry/ Plantation Horticulture and other related streams	1	Horticulture/Plantation/Forestry/Horticulture and related streams	0		Practical skills and knowledge required in Coffee Plantation

Assessor Certification	
Domain Certification	Platform Certification
Certified for Job Role “ Coffee Plantation Worker ”, mapped to QP: “AGR/Q0501, 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 are 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 is 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
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	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).
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	The 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	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
IPM	Integrated Pest Management
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