Model Curriculum

QP Name: Vineyard Worker

QP Code: AGR/Q0305

Version: 2.0

NSQF Level: 3

Model Curriculum Version: 1.0

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	Fruit Crops Cultivation
Country	India
NSQF Level	3
Aligned to NCO/ISCO/ISIC Code	NCO-2015/6111.9900
Minimum Educational Qualification and Experience	8th grade pass with 2 years of relevant experience OR Grade 8 pass and pursuing continuous schooling in regular school with vocational subject OR 5th grade pass with 5 years of relevant experience OR Previous relevant qualification of NSQF Level 2 with 1 year of relevant experience OR Previous relevant qualification of NSQF Level 2.5 with 6 months of relevant experience
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years
Last Reviewed On	29/03/2023
Next Review Date	29/03/2026
NSQC Approval Date	29/03/2023
QP Version	2.0
Model Curriculum Creation Date	29/03/2023
Model Curriculum Valid Up to Date	29/03/2026
Model Curriculum Version	1.0
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:

- Explain the process of assisting in establishing a vineyard.
- Describe the process of assisting in propagating, planting and maintaining grape vines.
- Demonstrate the process of assisting in training and pruning grape vines.
- Describe the process of assisting in harvesting and post-harvest management of grapes.
- Demonstrate various practices to ensure health and safety at 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 a Vineyard Worker	05:00	00:00	0:00	00:00	05:00
AGR/N0323: Assist in establishing a vineyard **NOS Version- 2.0** **NSQF Level- 3**	**10:00**	**15:00**	**0:00**	**00:00**	**25:00**
Module 2: Process of assisting in establishing a vineyard	10:00	15:00	0:00	00:00	25:00
AGR/N0324: Assist in propagating, planting and maintaining grape vines **NOS Version- 2.0** **NSQF Level- 3**	**25:00**	**35:00**	**0:00**	**00:00**	**60:00**
Module 3: Process of assisting in propagating, planting and maintaining grape vines	25:00	35:00	0:00	00:00	60:00
AGR/N0325: Assist in training and pruning grape vines **NOS Version- 2.0**	**15:00**	**15:00**	**0:00**	**00:00**	**30:00**

NSQF Level- 3					
Module 4: Process of assisting in training and pruning grape vines	15:00	15:00	0:00	00:00	30:00
AGR/N0326: Assist in harvesting and post-harvest management of grapes **NOS Version- 2.0** **NSQF Level- 3**	**30:00**	**30:00**	**0:00**	**00:00**	**60:00**
Module 5: Process of assisting in harvesting and post-harvest management of grapes	30:00	30:00	0:00	00:00	60:00
AGR/N9903 Maintain health and safety at the workplace **NOS Version- 3.0** **NSQF Level- 4**	**05:00**	**25:00**	**0:00**	**00:00**	**30:00**
Module 6: Hygiene and cleanliness	02:00	10:00	0:00	00:00	12:00
Module 7: Safety and emergency procedures	03:00	15:00	0:00	00:00	18:00
DGT/VSQ/N0101: Employability Skills (30 Hours) **NOS Version- 1.0** **NSQF Level- 2**	**30:00**	**00:00**	**0:00**	**00:00**	**30:00**
Module 8: Employability Skills	30:00	00:00	0:00	00:00	30:00
Total Duration	**120:00**	**120:00**	**0:00**	**00:00**	**240:00**
OJT: 30 Hours					

Module Details

Module 1: Introduction to the role of a Vineyard Worker
Bridge Module

Terminal Outcomes:

- Discuss the job role of a Vineyard Worker.

Duration: 05:00	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 Vineyard Worker. - Identify various employment opportunities for a Vineyard 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 establishing a vineyard
Mapped to AGR/N0323 v2.0

Terminal Outcomes:

- Explain the process of assisting in preparing the land.
- Describe the process of assisting in treating and storing the planting material.

Duration: 10:00	Duration: 15:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- List the suitable agro-climatic conditions for the cultivation of different grape varieties grown in different regions. - Explain the criteria for selecting an appropriate site for establishing a vineyard. - Discuss types of soils and soil conditions (i.e. pH and organic matter) suitable for grape cultivation. - State the suitable planting systems for a vineyard. - Describe the process of preparing the land for grape cultivation and the use of relevant machinery, tools and equipment. - State the recommended dimensions of pits to be created transplant grape vines. - State the irrigation systems suitable for vineyards. - State the appropriate fencing for vineyards to protect the vines and produce from external threats. - Explain the importance of ensuring efficient drainage in vineyards. - List various inputs required for establishing a vineyard. - Explain the importance of procuring healthy planting material from reliable sources, such as government nurseries. - Explain how to treat the planting material. - State the appropriate conditions	- Demonstrate how to remove all the weeds, debris and waste materials from the land as per the supervisor's instructions. - Demonstrate the process of ploughing and levelling the land using the appropriate machinery and implements, such as the tractor, plough and leveller. - Demonstrate the process of applying the appropriate treatment in the field as per the recommendations of the soil-testing laboratory and the supervisor's instructions. - Show how to create pits of appropriate width and depth for planting grape vine stem cuttings, following the given instructions. - Demonstrate the process of installing the training system infrastructure as per the supervisor's instructions. - Show how to create drainage channels in the field as per the supervisor's instructions for irrigation or install an appropriate type of irrigation system. - Demonstrate the process of installing the appropriate irrigation system in the vineyard. - Demonstrate the process of installing the appropriate type of fencing around the vineyard to protect. - Demonstrate the process of treating the planting material using the appropriate treatment as per the supervisor's instructions.

required for storing the planting material.	

Classroom Aids

Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop

Tools, Equipment and Other Requirements

Installed Video camera with high resolution and recording facility, Fire Extinguisher, Shovel, Buckets, Tractor, Gripple Tool

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Module 3: Process of assisting in propagating, planting and maintaining grape vines
Mapped to ARG/N0324 v2.0

Terminal Outcomes:

- Explain the process of assisting in propagating grape vines.
- Explain the process of assisting in planting and maintaining grape vines.

Duration: 25:00	Duration: 35:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Describe different methods of propagating grape vines. - Explain the use of bio-regulators in the propagation of vines. - Explain how to prepare and treat different types of grapevine stem cuttings. - State the planting schedule for different grape varieties in different regions. - State the immediate care that should be given to grape vines after planting. - Explain the factors that influence the irrigation requirement of different grape varieties. - List the common pests and diseases that affect grape vines and grapes. - Explain the relevant preventive measures to be followed protect the grape vines and crop from pest and disease infestation. - Elucidate the benefit and process of adopting the natural enemies of grape pests to control pest infestation. - Explain the symptoms of pest and disease infestation in grape vines and grapes. - Discuss the appropriate Integrated Pest and Disease Management (IPDM) techniques to be followed to remove grapevine pests and disease. - State the appropriate treatment to be applied to grape vines to remove	- Demonstrate how to prepare and treat hardwood stem cuttings as per the supervisor's instructions. - Demonstrate the process of propagating grape vines following the appropriate propagation methods, e.g. grafting, layering, etc. - Demonstrate the process of applying the appropriate fertilizers to the planted stem cuttings and irrigate them with the recommended quantity. - Show how to prepare the appropriate pesticides and apply them to grape vines using the relevant plant protection equipment. - Demonstrate the process of applying the recommended bio-regulators and organic and inorganic fertilizers to grape vines in appropriate quantities as per the supervisor's instructions. - Show how to prepare and apply the appropriate herbicides/weedicides in the vineyard as instructed by the supervisor. - Demonstrate the process of carrying out regular repair and maintenance of the irrigation system and fencing around the vineyard.

pests and diseases.

- Explain the appropriate safety measures to be taken while applying pesticides.

- State the recommended combinations of biological, mechanical and chemical control methods for effective pest and disease prevention.

- Explain the use of different types of organic and inorganic fertilizers.

- List the macro and micronutrient requirements of grape varieties according to the stages of their growth.

- Explain how to prepare organic fertilizers such as FYM, vermicompost, manure, etc.

- List the common types of weeds found in vineyards.

- Describe different types of intercultural and mechanical methods for effective weed control.

- Explain the use of relevant tools and implements to remove weeds manually.

- Explain the use of relevant plant protection equipment.

Classroom Aids

Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop

Tools, Equipment and Other Requirements

Wire Cutter, Fruit Picking Shears, Grape Lug Boxes/Bucket, Prunning Tools - Pruners, Loppers , Folding Saws, Hand Held Scale

Module 4: Process of assisting in training and pruning grape vines
Mapped to AGR/N0325 v2.0

Terminal Outcomes:

- Describe the process of assisting in training and pruning the grape vines.

Duration: 15:00	Duration: 15:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Explain the appropriate measures to be followed to achieve the desired growth of grafted vines, shoots, and trunks on the training system infrastructure. - Explain how to induce maximum bud break grape vines through training. - State the appropriate pruning season to be followed for grape vines according to the region. - Explain the use of appropriate pruning tools and implements, such as pruning knife and secateurs. - State the recommended fungicide to be applied to grape vines after pruning to protect them from fungal infection. - Elucidate the effect of climatic conditions and pruning on grapevine cane vigour and thickness.	- Demonstrate the process of training the grapevines on the training system infrastructure, ensuring no damage to the vines. - Demonstrate the process of carrying out the regular repair and maintenance of the training system infrastructure as per the supervisor's instructions. - Demonstrate the process of carrying out pruning as per the supervisor's instructions, using the appropriate pruning tools and implements. - Show how to prepare the recommended fungicide for application, following the manufacturer's instructions. - Demonstrate the process of applying fungicide to grape vines after pruning to protect them from fungal infection.
Classroom Aids	
Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop	
Tools, Equipment and Other Requirements	
Grape Bins, Knapsack Sprayer, Vine Hedger, Fence Hammer, Soil Auger, Soil Spader, Cultivator/Seed Drill	

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Module 5: Process of assisting in harvesting and post-harvest management of grapes
Mapped to AGR/N0326 v2.0

Terminal Outcomes:

- Demonstrate the process of assisting in harvesting, sorting and grading grapes.

- Explain the process of assisting in storing, packing, loading and unloading grapes.

Duration: 30:00	Duration: 30:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- List the maturity indices of different grape varieties. - Explain the use of a refractometer. - Explain the use of appropriate tools and implements for harvesting grapes. - Elucidate the importance of harvesting grapes in the morning and evening to protect them from high temperature. - Explain the benefit of collecting the harvested grapes in clean perforated plastic crates. - Elucidate the importance and process of removing field heat from the harvested grapes. - Elucidate the importance and process of clipping the damaged, immature, diseased, shrivelled, undersized, underdeveloped and uneven-sized berries from the lots of harvested grapes. - Describe the process of sorting and grading grapes on the applicable parameters. - State the necessary treatment to be applied in the storage to remove any pests. - Explain the importance of storing grapes in a safe and hygienic cold storage. - State the appropriate temperature and humidity to be maintained in a grape storage.	- Demonstrate the process of harvesting fully ripe bunches of grapes using the appropriate tools, such as sharp secateurs. - Demonstrate the process of sorting and grading grapes on the applicable parameters. - Demonstrate the process of applying the appropriate treatment in the storage area as per the supervisor's instructions to make it pest and rodent-free. - Show how to pack grapes in the appropriate packing material as per the supervisor's instructions. - Show how to assist the supervisor in maintaining the manual and electronic records of sales and payments.

- List the appropriate packing material and mode of transport for grapes.

- Elucidate the recommended measures to be followed to protect the harvested grapes from damage and contamination while loading, unloading and transporting them.

- Explain the importance of maintaining records of sales and payments manually and electronically.

Classroom Aids

Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop

Tools, Equipment and Other Requirements

Grape Bins, Knapsack Sprayer, Vine Hedger, Fence Hammer, Soil Auger, Soil Spader, Cultivator/Seed Drill

Module 6: Hygiene and cleanliness
Mapped to NOS AGR/N9903 v3.0

Terminal Outcomes:

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

Duration: 02:00	Duration: 10:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- 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.	- 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 v3.0

Terminal Outcomes:

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

Duration: 03:00	Duration: 15:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- 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.	- Check various areas of the workplace for leakages, water-logging, pests, fire, etc. - Demonstrate how to safely use the PPE and implement 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

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

Module 9: On-the-Job Training

Mapped to Vineyard Worker

Mandatory Duration: 30:00	Recommended Duration: 00:00
Location: On-Site	

Terminal Outcomes

- Explain the criteria for selecting an appropriate site for establishing a vineyard.
- create pits of appropriate width and depth for planting grape vine stem cuttings, following the given instructions.
- Install the appropriate irrigation system in the vineyard.
- Prepare and treat hardwood stem cuttings as per the supervisor's instructions.
- Prepare and apply the appropriate herbicides/weedicides in the vineyard as instructed by the supervisor.
- Carry out the regular repair and maintenance of the training system infrastructure as per the supervisor's instructions.
- Prepare the recommended fungicide for application, following the manufacturer's instructions.
- Sort and grade grapes on the applicable parameters.
- Pack grapes in the appropriate packing material as per the supervisor's instructions.

Annexure

Trainer Requirements

Trainer Prerequisites					
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training Experience		Remarks
		Years	Specialization	Years	Specialization	
10th Class	Class 10th	7	Agriculture Crop Production	0		Vineyard Worker with 7 Years' experience of working with registered Vineyard after 10th Pass
12th Class	Class 12th	4	Agriculture Crop Production	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 case-to-case basis.
Diploma in Agriculture	Diploma in Agriculture	3	Agriculture Crop Production	0		
Graduate	Graduate	2	Agriculture Crop Production	0		For school Program minimum qualification of Trainer should be Graduate. Their Teaching experience will be considered industry experience

Graduate	Graduate (Agriculture / Horticulture/ Forestry)	0.5	Agriculture Crop Production			

Trainer Certification	
Domain Certification	**Platform Certification**
Certified for Job Role "**Vineyard Worker**", mapped to QP: "AGR/Q0305, v2.0", 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*	
Graduation	B.Sc (Agriculture/ Horticulture and related streams)	5	Horticulture crop production activities/ Viticulture and other related experience	0		Practical skills and knowledge required in Viticulture
Post-graduation	M.Sc (Horticulture and related streams)	2	Horticulture crop production activities/ Viticulture and other related experience	0		Practical skills and knowledge required in Viticulture
PhD	PhD (Horticulture and related streams)	1	Horticulture crop production activities/ Viticulture and other related experience	0		Practical skills and knowledge required in Viticulture

Assessor Certification	
Domain Certification	**Platform Certification**
Certified for Job Role "**Vineyard Worker**", mapped to QP: "AGR/Q0305, v2.0", 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. <u>Multiple Choice Questions</u>: To assess basic knowledge (Objective/Subjective)
2. <u>Viva:</u> To assess awareness on processes (Oral and/or written questioning)
3. <u>Practical:</u> To evaluate skills and identify competencies. (Observation)

Assessments for knowledge and awareness on processes may be conducted through 'real-time' internet-based evaluation or by conducting the same 'offline' through TABs. Skills and competencies are to be assessed by conducting 'practical' on the ground through qualified and ToA certified assessors.

An individual must have adequate knowledge and skills to perform a specific task, weightage for different aspects of the assessment is given as follows:

- Multiple Choice Questions: 20%-30%, depending on the specific QP
- Viva: 20%
- Practical: 50% - 60% (Involves demonstrations of applications and presentations of procedures/tasks and other components)
- Assessment will be carried out by certified assessors through empaneled assessment partners. Based on the results of the assessment; ASCI will certify the learners/candidates

Testing Environment

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

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

- Multilingual assessments (ASCI is conducting the assessments in 13 + languages pan India)
- Rubric driven assessments in Practical/Viva sections and responses recorded accordingly
- All responses, data, records and feedback stored digitally on the cloud
- Advanced auto-proctoring features – photographs, time-stamp, geographic-tagging, toggle- screen/copy-paste disabled, etc.
- Android-based monitoring system
- End to end process from allocation of a batch to final result upload, there is no manual intervention

- Assessment will normally be fixed for a day after the end date of the training / within 7 days of completion of training.

- Assessment will be conducted at the training venue

- The room where assessment is conducted will be set with proper seating arrangements with enough space to curb copying or other unethical activities

- Question bank of theory and practice will be prepared by ASCI /assessment agency and approved ASCI. Only from approved Question Bank assessment agency will prepare the question paper. Theory testing will include multiple-choice questions, pictorial questions, etc. which will test the trainee on his theoretical knowledge of the subject.

- The theory, practical and viva assessments will be carried out on the same day. In case of a greater number of candidates, the number of assessors and venue facilitation be increased and facilitated

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 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 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 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 candidate 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	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