Model Curriculum

QP Name: Gardener

QP Code: PWD/AGR/Q0801

Version: 2.0

NSQF Level: 3

Model Curriculum Version: 2.0

Expository – Speech and Hearing Impairment (E004)

Skill Council for Person with Disability | Address: 501-City Centre, 12/5 Dwarka New Delhi – 110075

Table of Contents

Training Parameters

Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Landscaping, Gardening & Urban Farming
Country	India
NSQF Level	3
Aligned to NCO/ISCO/ISIC Code	NCO-2015/6113.0301
Minimum Educational Qualification and Experience	5th Class OR Certificate-NSQF (L3, AGR/Q0804 Assistant Gardener) OR Certificate-NSQF (L3, AGR/Q0807 Nursery Worker)
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years
Last Reviewed On	22/02/2022
Next Review Date	18/03/2026
NSQC Approval Date	27/02/2022
QP Version	2.0
Model Curriculum Creation Date	18/03/2021
Model Curriculum Valid Up to Date	18/03/2026
Model Curriculum Version	1.0
Minimum Duration of the Course	430 Hours
Maximum Duration of the Course	430 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 raising saplings in the nursery for transplanting in the garden.

- Describe various activities required to prepare for setting up the garden.

- Describe the process of planning and setting up a garden.

- Demonstrate the process of setting up the garden as per a plan.

- Demonstrate the process of carrying out maintenance of the garden.

- Explain the importance of practising inclusion and gender equality at work.

- Demonstrate various practices to maintain personal hygiene, cleanliness, and safety at the workplace.

- Demonstrate the process of designing, setting up and maintaining a rooftop garden.

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 Modules (PwD)	**56:00hrs**	**34:00hrs**	_	_	**90:00hrs**
Bridge Module (PwD) Learn Basic Indian Sign Language (ISL)	15:00hrs	15:00hrs	_	_	30:00hrs
Bridge Module (PwD) Use Basic English	25:00hrs	15:00hrs	_	_	40:00hrs
Bridge Module (PwD) Personal and Social Skill	08:00hrs	02:00hrs	_	_	10:00hrs
Bridge Module (PwD) Professional & Ethical Behaviour in the Workplace	08:00hrs	02:00hrs	_	_	10:00hrs
Bridge Module	**4:00**	**0:00**	**0:00**	**0:00**	**4:00**

Module 1: Introduction to the role of a Gardener	4:00	0:00	0:00	0:00	4:00
AGR/N0801 Raise saplings in the nursery for transplanting in the garden **NOS Version- 2.0** **NSQF Level- 3**	**28:00**	**40:00**	**0:00**	**0:00**	**68:00**
Module 2: Propagation of plants in a nursery	28:00	40:00	0:00	0:00	68:00
AGR/N0802 Prepare a plan to set up the garden **NOS Version- 2.0** **NSQF Level- 3**	**32:00**	**48:00**	**0:00**	**0:00**	**80:00**
Module 3: Preparation for setting up the garden	32:00	48:00	0:00	0:00	80:00
AGR/N0803 Set up the garden as per the plan **NOS Version- 2.0** **NSQF Level- 3**	**20:00**	**32:00**	**0:00**	**0:00**	**52:00**
Module 4: Process of establishing the garden	20:00	32:00	0:00	0:00	52:00
AGR/N0842 Carry out maintenance of the garden **NOS Version- 1.0** **NSQF Level- 3**	**20:00**	**32:00**	**0:00**	**0:00**	**52:00**
Module 5: Maintenance of the garden	20:00	32:00	0:00	0:00	52:00
AGR/N9918 Communicate effectively at the workplace **NOS Version-2.0** **NSQF Level-3**	**4:00**	**12:00**	**0:00**	**0:00**	**16:00**
Module 6: Effective communication at the workplace	4:00	12:00	0:00	0:00	16:00
AGR/N9903 Maintain health and safety at the workplace **NOS Version- 3.0** **NSQF Level-3**	**4:00**	**12:00**	**0:00**	**0:00**	**16:00**
Module 7: Hygiene and cleanliness	2:00	2:00	0:00	0:00	4:00

Module 8: Safety and emergency procedures	2:00	10:00	0:00	0:00	12:00
AGR/N0843 Design, set up and maintain a rooftop garden **NOS Version- 1.0** **NSQF Level-3**	**20:00**	**32:00**	**0:00**	**0:00**	**52:00**
Module 9: Process of designing, setting up and maintaining a rooftop garden	20:00	32:00	0:00	0:00	52:00
Total Duration	**188:00**	**242:00**	**00:00**	**0:00**	**430:00**

Module Details

Module 1: Learn Basic Indian Sign Language (ISL)
Mapped to: Bridge Module PWD

Terminal Outcomes:
- Communicate using basic Indian Sign Language.

Duration: 15:00	Duration: 15:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Discuss the regional differences in signs used in Indian Sign Language. - Describe ways to greet and respond to others. - Explain significance of facial expressions and gestures in enhancing meaning of signed words. - Discuss the general sentence rules used while signing	- Demonstrate introductions and greetings using Indian Sign language - Demonstrate use of finger spellings in ISL (for example: names, places and abbreviations.) - Express simple actions and feeling using ISL. - Express information related to time, directions, numbers and currency using ISL. - Express information related to self-using ISL. (e.g., name, native place, city, state, family members, work etc.)
Classroom Aids	
Laptop, white board, marker, projector	
Tools, Equipment and Other Requirements	
LCD TV, Visual curricula, Assistive Aid/Service, Ai-Live, Captions First, Captions 2020, Closed Capp, Let's Talk.	

Module 2: Use Basic English
Mapped to: Bridge Module PWD

Terminal Outcomes:
- Apply knowledge of basic English to interpret information received and respond accordingly.
- Recognise familiar words and basic phrases concerning self, family members and immediate workplace.
- Read and write simple sentences in English about self, activities planned and events of the day.

Duration: 25:00	Duration: 15:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- recognise words and phrases related to formal and informal greetings. - recognise simple personal information about self and others when shared in writing (e.g., name, age, place of residence etc.). - recognise very simple words related to home, neighborhoods, everyday objects, market place, names of the days of the week, months, time, directions, clothes food and drinks. - recognise simple pronouns (he/she/ we / they). - comprehend basic hobby related verbs (like playing, singing, dancing). - recognise common verbs related to movement of transport (e.g., buses run, boats sail). - recognise words related to common feelings and emotions. (e.g., sad, unhappy, depressed, irritated, furious, angry). - recognise familiar English words and phrases used in the workplace especially as instructions related to direction, safety instructions, date and time etc. (vocabulary: stop, close the door etc.).	- write basic personal information about self and others such as names, date of birth, ID numbers, address, nationality, marital status). - use simple words related to common diseases in sentences (e.g., cold, cough, headache, fever, pain etc). - write simple sentences using names of everyday objects, places, directions. (e.g., I live in Delhi.). - write words related to professions. (like vacancy, sale, associate, manager, supervisor, file etc). - write words and short phrases to describe travel, holidays and vacations. - frame written answer to simple questions related to self, food preferences, feelings etc. - Identify and read health, safety, security signage in English at works and public places or on gadgets and appliances when accompanied by related images or graphics. - read basic familiar words and phrases to identify areas of work, responsibilities and working relationships. - read and write simple sentences describing activities planned for the next day/week/month etc.
Sample Classroom Aids	
Laptop, white board, marker, projector	
Tools, Equipment and Other Requirements	
LCD TV, Visual curricula, Assistive Aid/Service, Ai-Live, Captions First, Captions 2020, Closed Capp, Let's Talk	

Module 3: Personal and Social Skill
Mapped to: Bridge Module PWD

Terminal Outcomes:

- Manage Professional and Social behaviour.

Duration: 08:00	Duration: 02:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Discuss the importance of professional appearance and behaviour at workplace. - Discuss the importance of following social etiquette in formal and informal settings. - Explain the principles of communication. - Discuss the barriers to effective communication and ways to overcome these. - Discuss the importance of managing stress.	- Display professional appearance. - Demonstrate formal and informal communication etiquettes/gestures/body language in dealing with seniors/peers or clients. - Demonstrate ways to manage stress as per choice like breathing exercises/ spending time with friends etc. - Create a method for stress management with reference to self by listing techniques/steps.
Classroom Aids	
Laptop, white board, marker, projector	
Tools, Equipment and Other Requirements	
LCD TV, Visual curricula, Assistive Aid/Service, Ai-Live, Captions First, Captions 2020, Closed Capp, Let's Talk.	

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Module 4: Professional & Ethical Behaviour in the Workplace
Mapped to: Bridge Module

Terminal Outcomes:

- Maintain professional and ethical behaviour in the work environment.

Duration: 8:00	Duration: 02:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Discuss the importance of Completing task/assignments on time/ by prioritizing. - Discuss the importance and challenges of team work in an organisation to achieve goals. - Discuss the importance of seeking assistance from peers and supervisor when required. - Outline the importance of maintaining privacy and confidentiality. - Discuss situations that may lead to conflict of interest with peers/organization and ways to resolves them.	- Prepare a work schedule prioritising given tasks. - Demonstrate effective team behaviour to accomplish a given task. - List activities/write application to seek assistance of supervisor/peers.
Classroom Aids	
Laptop, white board, marker, projector	
Tools, Equipment and Other Requirements	
LCD TV, Visual curricula, Assistive Aid/Service, Ai-Live, Captions First, Captions 2020, Closed Capp, Let's Talk.	

Module 5: Introduction to the role of a Gardener

Bridge Module

Terminal Outcomes:

- State the role and responsibilities of a Gardener.

Duration: 04:00	Duration: 00:00
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 Gardener. - Identify various employment opportunities for a Gardener.	
Classroom Aids	
Training kit - Trainer guide, Presentations, Whiteboard, Marker, projector, laptop	
Tools, Equipment and Other Requirements	
LCD TV, Visual curricula, Assistive Aid/Service, Ai-Live, Captions First, Captions 2020, Closed Capp, Let's Talk.	

Module 6: Propagation of plants in a nursery

Mapped to AGR/N0801 v2.0

Terminal Outcomes:

- Describe different methods of plant propagation.
- Demonstrate the process of propagating plants through different propagation methods.

Duration: 28:00	Duration: 40:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- List different types of plants grown in gardens according to the season. - Describe different methods of propagating plants in a nursery. - List various inputs required for propagating plants in a nursery. - Describe the process of preparing a nursery bed and seedbed. - Describe the process of constructing framed structures such as poly-tunnels, hardening chamber, mist chamber for plant propagation.	- Demonstrate the process of preparing the nursery bed. - Demonstrate the process of preparing farmyard manure or compost. - Demonstrate the use of relevant nursery tools and equipment. - Show how to sort out and treat the seeds before sowing them. - Demonstrate the process of preparing the raised, level or sunken seedbed. - Show how to acclimatise the saplings before transplanting them. - Demonstrate the process of propagating plants through cutting, root division, layering, and budding methods. - Prepare a sample record of nursery operations.
Classroom Aids	
Training kit (Trainer guide, Presentations). Whiteboard, Marker, projector, laptop	
Tools, Equipment and Other Requirements	
Seedling Tray, sacks, polythene, watering cans and equipment, shade net, greenhouse, shade house, plant labels, labellers, spade, khurpi, LCD TV, Visual curricula, Assistive Aid/Service, Ai-Live, Captions First, Captions 2020, Closed Capp, Let's Talk	

Module 7: Preparation for setting up the garden

Mapped to ARG/N0802 v2.0

Terminal Outcomes:

- Describe the process of planning a garden.
- List various resources required for setting up a garden.

Duration: 32:00	Duration: 48:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Describe the process of assessing the soil and climate characteristics at a proposed site to establish suitability for planting a garden. - Describe the process of coordinating with an authorised lab to identify the soil's micro and macro-nutrient requirements. - List a variety of materials required for setting up a garden. - List various trees**,** plants, shrubs, grass, hedges and edges used for setting up a garden. - Describe the process of preparing a layout for setting up a garden. - Describe basic practices related to maintaining the record of purchase and payments. - Describe the basic accounting and inventory management practices.	- Demonstrate the process of assessing various parameters required for setting up the garden. - Demonstrate the process of applying the necessary treatment to improve the soil's fertility. - Prepare a sample layout for setting up a garden. - Prepare a sample list of various materials and resources required for establishing a garden.
Classroom Aids	
Training kit (Trainer guide, Presentations). Whiteboard, Marker, projector, laptop	
Tools, Equipment and Other Requirements	
Samples of accessories, conduit pipes, drain boards, GC fabric, working drawings: irrigation layout, electric lines layout, concept drawing, LCD TV, Visual curricula, Assistive Aid/Service, Ai-Live, Captions First, Captions 2020, Closed Capp, Let's Talk.	

Module 4: Process of establishing the garden

Mapped to AGR/N0803 v2.0

Terminal Outcomes:

- Describe the process of planting a garden.
- Demonstrate the process of preparing the field for planting.
- Demonstrate the process of setting up various garden features, and irrigation and fertigation systems.

Duration: 20:00	Duration: 32:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Describe the process of preparing the field for planting. - Identify various materials used for treating garden soil. - Describe the process of planting various types of trees, plants, shrubs, hedges and edges. - Describe the process of preparing a flower bed. - Describe the process of installing different types of irrigation systems. - List different garden features and describe their installation process. - Explain the benefits of resource optimisation.	- Demonstrate the process of preparing the field for planting. - Demonstrate the process of planting trees, plants, shrubs, grass, hedges, edges, vegetables and fruit plants. - Show how to apply fertilizers, manure and mulch. - Demonstrate the process of setting up different types of irrigation system such as drip irrigation, sprinkler irrigation, subsurface irrigation. - Demonstrate the process of installing a fertigation system. - Show how to set up various garden features such as walkways, statues, and fountain. - Demonstrate the process of preparing a flower bed.
Classroom Aids	
Training kit (Trainer guide, Presentations)	
Tools, Equipment and Other Requirements	
Hedge cutter, shears, loppers, sprayers, plant labels, pesticides, weedicides, fertilizers, water pumps and equipment, watering timers, and controllers, LCD TV, Visual curricula, Assistive Aid/Service, Ai-Live, Captions First, Captions 2020, Closed Capp, Let's Talk	

Module 8: Maintenance of the garden

Mapped to AGR/N0842 v1.0

Terminal Outcomes:

- Describe the process of performing nutrition, pest and disease management for a variety of garden plants.
- Demonstrate the process of performing nutrition, pest and disease management for a variety of garden plants.
- Demonstrate the process of carrying out training, pruning, and mowing in a garden.
- Demonstrate the process of carrying out maintenance of the irrigation and fertigation system.
- Demonstrate the process of carrying out maintenance of garden features.

Duration: 20:00	Duration: 32:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Describe the use of different types of fertilizers, pesticides, and insecticides. - Explain macro and micronutrient management of various types of horticultural plants, trees, shrubs, hedges and edges. - Describe the process of training and pruning a variety of plants, trees, shrubs, hedges and edges. - Describe the process of carrying out repair and maintenance of different types of irrigation and fertigation systems. - Describe various weed control methods.	- Show how to assess various garden plants, trees, shrubs, hedges and edges for the presence of pests and diseases. - Demonstrate the process of applying different types of insecticides and pesticides using the relevant Personal Protective Equipment (PPE). - Prepare a sample record of insecticides and pesticides used in the garden. - Demonstrate the process of training and pruning different types of plants, trees, shrubs, hedges and edges. - Demonstrate the process of carrying out regular repair and maintenance of the irrigation or fertigation installed in the garden. - Show how to maintain a variety of garden features.
Classroom Aids	
Training kit (Trainer guide, Presentations)	
Tools, Equipment and Other Requirements	
Kassi / Spade, Khurpi, Weeder, Side shear, Broom, Rake, Watering Can, Hand hose, Bucket, Plant Pruner, Wheel Barrow, Hand Sprayer, Budding & Grafting Set, Earthen Pots, Hedge Cutter, Polythene Bags (Garbage), Seed Packets, Gunny bags, Tags-labels, Budding-tape, Sutli, Moss-grass, LCD TV, Visual curricula, Assistive Aid/Service, Ai-Live, Captions First, Captions 2020, Closed Capp, Let's Talk. etc.	

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Module 9: Effective communication at the workplace

Mapped to NOS AGR/N9918 v2.0

Terminal Outcomes:

- Apply techniques for effective communication with the stakeholders.
- Explain how to mentor an apprentice.
- Discuss ways to promote diversity and inclusion at the workplace.

Duration: 04:00	Duration: 12:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Explain the importance of verbal and non-verbal communication at the workplace. - Explain the effective methods of sharing and seeking information and feedback at the workplace. - Explain the procedure for completing work-related documentation. - Describe the process of mentoring an apprentice at the workplace. - Explain the importance of inclusion of all genders and People with Disability (PwD) at the workplace. - Explain gender concepts (gender as a social construct, gender sensitivity, gender equality etc.), issues and applicable legislation. - Explain ways in which a conducive working environment can be created for all genders and PwD. - Define the need for appropriate verbal and non-verbal communication while interacting with all genders and PwD. - Explain the applicable PwD related regulations. - Explain the procedure to report inappropriate behaviour e.g., harassment.	- Demonstrate the requisite level of proficiency in verbal and non-verbal communication at the workplace. - Demonstrate different approaches to mentoring an apprentice at the workplace. - Prepare a sample training schedule for an apprentice. - Demonstrate appropriate verbal and non-verbal communication that is respectful of genders and disability.
Classroom Aids:	
Trainee's training kit and guide, Power-Point presentation, computer, projector, black/ whiteboard. Charts and videos on workplace communication.	
Tools, Equipment and Other Requirements	
Workplace records and documents, LCD TV, Visual curricula, Assistive Aid/Service, Ai-Live, Captions First, Captions 2020, Closed Capp, Let's Talk.	

Module 10: 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: 02:00
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 cleanliness of thework 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, LCD TV, Visual curricula, Assistive Aid/Service, Ai-Live, Captions First, Captions 2020, Closed Capp, Let's Talk.	

Module 12: 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: 02:00	Duration: 10:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- List the PPE required at the workplace. - Describe the commonly reported hazards at the workplace. - Explain the hazards caused by overuse and exposure to various chemicals, pesticides and fumigants. - Describe the basic safety checks to be done before the operation of any equipment or 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 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, LCD TV, Visual curricula, Assistive Aid/Service, Ai-Live, Captions First, Captions 2020, Closed Capp, Let's Talk.	

Module 13: Process of designing, setting up and maintaining a roof top garden

Mapped to AGR/N0843 v1.0

Terminal Outcomes:

- Discuss various parameter to assess for setting up a rooftop garden.
- Demonstrate the process of setting up the rooftop garden.
- Describe the process of carrying out the repair and maintenance of a rooftop garden.

Duration: 20:00	Duration: 32:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Explain various parameters to assess while planning a rooftop garden. - Explain the importance of planning rooftop garden plants and features according to the roof's loading capacity. - List various materials of appropriate size and weight for setting up a rooftop garden. - Explain different ways of waterproofing a rooftop garden. - List varieties of trees, plants, and shrubs suitable for a rooftop garden. - Describe the process of installing windbreaks and appropriate support to provide shade for rooftop plants, trees, and shrubs.	- Show how to assess various parameters while planning a rooftop garden such as the roof's loading capacity, climatic conditions, sunlight and wind exposure, etc. - Prepare a sample plan for the rooftop garden. - Show how to plant trees, plants, and shrubs in a rooftop garden. - Demonstrate the process of installing windbreaks, and shading for the plants, trees, and shrubs. - Demonstrate the process of carrying out repair and maintenance of the rooftop garden, garden features, irrigation and drainage system.
Classroom Aids	
Training kit (Trainer guide, Presentations)	
Tools, Equipment and Other Requirements	
Kassi / Spade, Khurpi, Weeder, Side shear, Broom, Rake, Watering Can, Hand hose, Bucket, Plant Pruner, Wheel Barrow, Hand Sprayer, Budding & Grafting Set, Earthen Pots, Hedge Cutter, Polythene Bags (Garbage), Seed Packets, Gunny bags, Tags-labels, Budding-tape, Sutli, Moss-grass, LCD TV, Visual curricula, Assistive Aid/Service, Ai-Live, Captions First, Captions 2020, Closed Capp, Let's Talk. etc.	

Annexure

Trainer Requirements

Trainer Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training Experience		Remarks
		Years	Specialization	Years	Specialization	
10th Class		7	Gardening / Landscaping	0		Nursery Worker with 7 Years' experience with Government / civic authority / registered nursery/ corporates
12th Class		4	Gardening / Landscaping	0		Ex-Service-Man including Ex-Paramilitary personnel: Minimum Qualification is 10+2 with an Honorable Discharge / Pension. SSC would consider a relaxation/waiver of sector-specific experience on a case-to-case basis.
Diploma	landscaping/ Agriculture/ Horticulture	3	Gardening / Landscaping	0		
Graduate	In any stream	2	Gardening / Landscaping	0		For the school Program minimum qualification of the Trainer should be Graduate. Their Teaching experience will be considered industry experience
Graduate	Agriculture / Horticulture/ Forestry	0.5	Gardening / Landscaping	0		

Trainer Certification		
Domain Certification	**Platform Certification**	**Disability specific Top Up training**
Certified for Job Role "**Gardener**", mapped to QP: "AGR/Q0801, v2.0", Minimum accepted score is 80%	Recommended that the Trainer is certified for the Job Role: "Trainer", mapped to the Qualification Pack: "MEP/Q2601, v1.0". The minimum accepted score as per MEPSC guidelines is 80%.	The Inclusive Trainer should be certified in Disability Specific Top Up Training/ PWD/Q0101, v1.0 Trainer-PwD conducted by SCPwD with minimum accepted score of 80% as per SCPwD guidelines. The Indian Sign Language Interpreter with 2/3 years of experience should be mandatory during the training, counselling and placement of Persons with Speech and Hearing Impairment. A Certification by Indian Sign Language Research and Training Centre (ISLRTC) or Ali Yavar Jung National Institute of Speech and Hearing Disabilities (Divyangjan) (AYJNISHD(D)) will be desirable.

Assessor Requirements

Assessor Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training/Assessment Experience		Remarks
		Years	Specialization	Years	Specialization	
12th Class	Science stream	7	Agriculture / Forestry / Horticulture and related streams and fields	0		Ex-Service-Man including Ex-Paramilitary personnel: Minimum Qualification is 10+2 with an Honorable Discharge / Pension. SSC would consider a relaxation/waiver of sector-specific experience on a case-to-case basis. Practical skills and knowledge required in various tasks of gardening
Diploma	Landscaping/ Agriculture/ Horticulture	7	Agriculture / Forestry / Horticulture and related streams and fields	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. Practical skills and knowledge required in various tasks of gardening
B.Sc	Agriculture/ Botany/ Forestry/ Horticulture/ Floriculture and related streams	5	Agriculture / Forestry / Horticulture and related streams and fields	0		Practical skills and knowledge required in various tasks of Gardening

M.Sc	Agriculture/ Botany/ Forestry/ Horticulture/ Floriculture and related streams	2	Agriculture / Forestry / Horticulture and related streams and fields	0		Practical skills and knowledge required in various tasks of gardening
PhD	Agriculture/ Botany/ Forestry/ Horticulture/ Floriculture and related streams	1	Agriculture / Forestry / Horticulture and related streams and fields	0		Practical skills and knowledge required in various tasks of gardening

Assessor Certification		
Domain Certification	**Platform Certification**	**Disability specific Top Up training**
"**Gardener**", "AGR/Q0801, v2.0", Minimum accepted score is 80%	Certified for the Job Role: "Assessor", mapped to theQualification Pack: "MEP/Q2701, v1.0", with aminimum score of 80%.	The Inclusive Assessor should be certified in Disability Specific Top Up Training conducted by SCPwD with minimum accepted score of 80% as per SCPwD guidelines.

Assessment Strategy

Assessment System Overview

In Agriculture Sector it is of ultimate importance that individuals dealing with crop production or livestock have the requisite knowledge and competencies to undertake the task. Based on the Assessment Criteria, SSC in association with empanelled AAs, define the test structure for the given job roles to cover the required skills and competencies. Assessment strategy consists of the following:

1. <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.

While it is important that an individual has adequate knowledge and skills to perform a specific task, weightage for different aspects of assessment are given as follows:

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

Testing Environment

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

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

- Multilingual assessments (ASCI is conducting assessments in 13 + languages pan India)

- Rubric driven assessments in Practical/Viva sections and responses recorded accordingly
- All responses, data, records and feedback stored digitally on the cloud
- Advanced auto-proctoring features – photographs, time-stamp, geographic-tagging, toggle- screen/copy-paste disabled, etc.
- Android-based monitoring system
- End to end process from allocation of a batch to final result upload, there is no manual intervention
- Assessment will normally be fixed for a day after the end date of the training / within 7 days of completion of training.
- Assessment will be conducted at the training venue
- The room where assessment is conducted will be set with proper seating arrangements with enough space to curb copying or other unethical activities
- Question bank of theory and practical will be prepared by ASCI /assessment agency and approved ASCI. Only from approved Question Bank assessment agency will prepare the question paper. Theory testing will include multiple-choice questions, pictorial question, etc. which will test the trainee on his theoretical knowledge of the subject.
- The theory, practical and viva assessments will be carried out on the same day. In case of more number of candidates, the number of assessors and venue facilitation be increased and facilitated.

Assessment			
Assessment Type	**Formative or Summative**	**Strategies**	**Examples**
Theory	Summative	MCQ/Written exam	Knowledge of facts related to the job role and functions. Understanding of principles and concepts related to the job role and functions
Practical	Summative	Structured tasks/Demonstration	Practical application /Demonstration /Application tasks
Viva	Summative	Questioning and Probing	Mock interviews on the usability of job roles/advantages /importance of adherence to procedures. Viva will be used to gauge trainee's confidence and correct knowledge in handling the job situation

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

Assessment Quality Assurance framework

Assessment Framework and Design:

Based on the Assessment Criteria, SSC in association with AAs will define the test structure for the given roles to cover the required skills and competencies. ASCI offer a bouquet of tools for multi-dimensional evaluation of candidates covering language, cognitive skills, behavioural traits and domain knowledge.

Theoretical Knowledge - Item constructs and types are determined by a theoretical understanding of the testing objectives and published research about the item-types and constructs that have shown statistical validity towards measuring the construct. Test item types that have been reported to be coachable are not included. Based on these, items are developed by domain experts. They are provided with comprehensive guidelines of testing objectives of each question and other quality measures.

Type – Questions based on Knowledge Required, Case-based practical scenario questions and automated simulation-based questions.

Practical Skills - The practical assessments are developed taking into consideration two aspects: what practical tasks is the candidate expected to perform on the job and what aspects of the job cannot be judged through theoretical assessments. The candidates shall be asked to perform either an entire task or a set of subtasks depending on the nature of the job role

Type – Standardized rubrics for evaluation against a set of tasks in a demo/practical task

Viva Voce - Those practical tasks which cannot be performed due to time or resource constraints are evaluated through the viva mode. Practical tasks are backed up with Viva for thorough assessment and complete evaluation

Type – Procedural questions, dos and don'ts, subjective questions to check the understanding of practical tasks.

The assessor has to go through an orientation program organized by the Assessment Agency. The training would give an overview to the assessors on the overall framework of QP evaluation. The assessor shall be given a NOS and PC level overview of each QP as applicable. The overall structure of assessment and objectivity of the marking scheme will be explained to them. The giving of marks will be driven by an objective framework that will maintain the 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:
    - o Signed Attendance sheet
    - o Assessor feedback sheet
    - o Candidate feedback sheet
    - o Assessment checklist for assessor
    - o Candidate Aadhar/ID card verification
    - o Pictures of the classroom, labs to check the availability of adequate equipment's and tool to conduct the training and assessment
    - o Pictures and videos of Assessment, training feedback and infrastructure.
- Apart from the Assessor, a Technical assistant popularly known as Proctor also ensures the proper documentation and they verify each other's tasks.
- To validate their work on the day of the assessment, regular calls and video calls are done.
- On-boarding and training of assessor and proctor is done on a timely basis to ensure that the quality of the assessment should be maintained.
- Training covers the understanding of QP, NSQF level, NOS and assessment structure

Methods of Validation

- Morning Check (Pre-Assessment): Backend team of AA calls and confirms assessor/technical SPOC event status. Assessor/Technical SPOC are instructed to reach the centre on time by 9:30 AM / as decided with TC and delay should be highlighted to the Training Partner in advance.
- Video Calls: Random video calls are made to the technical SPOC/assessor so as to keep a check on assessment quality and ensure assessment is carried out in a fair and transparent manner
- Aadhar verification of candidates

- **Evening Check (Post Assessment):** Calls are made to the ground team to ensure the event is over by what time and the documentation is done properly or not.
- **TP Calling:** To keep a check on malpractices, an independent audit team calls the TP on a recorded line to take confirmation if there was any malpractice activity observed in the assessment on part of the AA/SSC team. If calls are not connected, an email is sent to the TP SPOC for taking their confirmation
- **Video and Picture Evidence:** Backend team collects video and pictures for assessment on a real-time basis and highlights any issue such as students sitting idle/ trainer helping the candidates during the assessment.
- **Surprise Visit:** Time to time SSC/AA Audit team can visit the assessment location and conduct a surprise audit for the assessment carried out by the ground team.

- **Geo Tagging:** On the day of the assessment, each technical SPOC is required to login into our internal app which is Geotagged. Any deviation with the centre address needs to be highlighted to the assessment team on a real-time basis.

Method for assessment documentation, archiving, and Access:

- ASCI has a fully automated result generation process in association with multiple AAs
- Theory, Practical and Viva marks form the basis of the results and encrypted files generated to avoid data manipulation. All responses captured and stored in the System with Time-Stamps at the end of AAs and SSC. NOS-wise and PC-wise scores can be generated.
- Maker Checker concept: One person prepares the results and another audit result which is internally approved by AA at first and then gets vetted at the end of SSC
- All softcopies of documents are received from the on-ground tech team over email. The same are downloaded by our internal backend team and saved in Repository. The repository consists of scheme-wise folders. These scheme-wise folders have job role specific folders. These specific folders have Year wise and Month wise folders where all documents are saved in Batch specific folders. All Hard copies are filed and stored in the storeroom.

Result Review & Recheck Mechanism –

- Time-stamped assessment logs
- Answer/Endorsement sheets for each candidate
- Attendance Sheet
- Feedback Forms: Assessor feedback form, Candidate feedback form, TP feedback form
- The results for each of the candidate shall be stored and available for review (retained for 5 years/ till the conclusion of the project or scheme)

Guidelines for Trainer

Accommodation Guideline recommended for Inclusive Trainers

Persons with Speech and Hearing Impairment

Characteristics

- Use other senses as mediums of learning. (Use gestures, body language, expressions, lip reading etc.).
- Use adapted material such as visual or sight vocabulary to provide first-hand experience.
- Use assistive devices such as hearing aid, loop system etc.
- Teach how to access sound-based information.

Guidelines for Trainers

- Make sure you are aware of the learners' language abilities and preferred learning style to ensure inclusion into the group.
- When you have a student with SHI in the group, reduce background noise or, request for a classroom that is away from noise. Make sure you have the whole group's attention before starting the session.
- Allow SHI students to sit where they wish. SHI students who can read the lip should sit near the front. (Optimum distance for lip-reading is considered to be about 6 feet.).
- Face the SHI student when speaking.
- Use clear speech.
- Make sure the room is well lit to allow the student with SHI to see your facial expression, signing and/or lip read.
- Use assistive device where available, to facilitate teaching-learning in the classroom.
- Arrange the classroom so that students can see each other, e.g., organizing the class in a circle or semicircle allows all students to see each other.
- Use shorter sentences, clearer speech.
- Associate words with real objects, pictures; for example, the colour concept.
- Use pictures (flash cards), real objects, real experiences, dramatization, and activities.
- You can write key points on the board or chart.
- Encourage other people or staff to develop communication strategies so that they can get into the style of students with SHI.

References

Glossary

Term	Description
Sector	Sector is a conglomeration of different business operations having similar business and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests
Key Learning	Key learning outcome is the statement of what a learner needs to know, understand and be able to do in order to achieve the terminal outcomes. A set of key learning outcomes will make up the training outcomes. Training outcome is specified in terms of knowledge, understanding (theory) and skills (practical application).
OJT (M)	On-the-job training (Mandatory); trainees are mandated to complete specified hours of training on site
OJT (R)	On-the-job training (Recommended); trainees are recommended the specified hours of training on site
Procedural Knowledge	Procedural knowledge addresses how to do something, or how to perform a
Training Outcome	Training outcome is a statement of what a learner will know, understand and be able to do upon the completion of the training.
Terminal Outcome	Terminal outcome is a statement of what a learner will know, understand and be able to do upon the completion of a module. A set of terminal outcomes help to achieve the training outcome.

Acronyms and Abbreviations

Term	Description
AGR	Agriculture
NOS	National Occupational Standard (s)
NSQF	National Skills Qualifications Framework
OJT	On-the-job Training
QP	Qualifications Pack
PwD	People with Disability
PPE	Personal Protective Equipment