



Model Curriculum

QP Name: Flower Grower

Electives: Rose/ Gerbera/ Chrysanthemum/ Orchid/ Marigold

QP Code: AGR/Q0705

Version: 1.0

NSQF Level: 2

Model Curriculum Version: 1.0

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Training Parameters

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| Sector | Agriculture |
| Sub-Sector | Agriculture Crop production |
| Occupation | Floriculture Farming |
| Country | India |
| NSQF Level | 2 |
| Aligned to NCO/ISCO/ISIC Code | NCO-2015/6113.0601 |
| Minimum Educational Qualification and Experience | No formal education |
| Pre-Requisite License or Training | NA |
| Minimum Job Entry Age | NA |
| Last Reviewed On | 29/09/2023 |
| Next Review Date | 29/09/2026 |
| NSQC Approval Date | 29/09/2023 |
| QP Version | 1.0 |
| Model Curriculum Creation Date | 21/09/2023 |
| Model Curriculum Valid Up to Date | 29/09/2026 |
| Model Curriculum Version | 1.0 |
| Minimum Duration of the Course | 210 Hours |
| Maximum Duration of the Course | 450 Hours |

Program Overview

This section summarizes the end objectives of the program along with its duration.

Training Outcomes

At the end of the program, the learner should have acquired the listed knowledge and skills to:

- Describe the process of preparing for the cultivation of flower crop.
- Demonstrate the process of propagating flower plant saplings.
- Demonstrate the process of harvesting, transplanting and maintaining sapling to grow flowers.
- Demonstrate the process of carrying out harvesting and post-harvest management of flower crop.
- Demonstrate the process of carrying out cultivation of rose flowers.
- Demonstrate the process of carrying out cultivation of gerbera flowers.
- Demonstrate the process of carrying out cultivation of chrysanthemum flowers.
- Demonstrate the process of carrying out cultivation of orchid flowers.
- Demonstrate the process of carrying out cultivation of marigold flowers.

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/N0732: Prepare for the cultivation of flower crops NOS Version- 1.0 NSQF Level- 2 | 15:00 | 15:00 | 0:00 | 0:00 | 30:00 |
| Module 1: Introduction to the role of a Flower Grower | 05:00 | 0:00 | 0:00 | 0:00 | 05:00 |
| Module 2: Process of preparing for the cultivation of flower crop | 10:00 | 15:00 | 0:00 | 0:00 | 25:00 |
| AGR/N0733: Propagate the flower plant saplings NOS Version- 1.0 NSQF Level- 2 | 10:00 | 20:00 | 0:00 | 0:00 | 30:00 |
| Module 3: Process of propagating flower plant saplings | 10:00 | 20:00 | 0:00 | 0:00 | 30:00 |
| AGR/N0734: Harvest, transplant and maintain the saplings to grow flowers | 10:00 | 20:00 | 0:00 | 0:00 | 30:00 |

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|---|--------------|--------------|-------------|-------------|---------------|
| NOS Version- 1.0 NSQF Level- 2 | | | | | |
| Module 4: Process of harvesting, transplanting and maintaining sapling to grow flowers | 10:00 | 20:00 | 0:00 | 0:00 | 30:00 |
| AGR/N0735: Carryout harvesting and post-harvest management of flower crop NOS Version- 1.0 NSQF Level- 2 | 15:00 | 15:00 | 0:00 | 0:00 | 30:00 |
| Module 5: Process of carrying out harvesting and post-harvest management of flower crop | 15:00 | 15:00 | 0:00 | 0:00 | 30:00 |
| DGT/VSQ/N0101 Employability Skills NOS Version- 1.0 NSQF Level- 2 | 30:00 | 00:00 | 0:00 | 0:00 | 30:00 |
| Module 6: Employability Skills | 30:00 | 00:00 | 0:00 | 0:00 | 30:00 |
| Total Duration | 80:00 | 70:00 | 0:00 | 0:00 | 150:00 |

Elective Module

The table lists the modules and their duration corresponding to the Optional NOS of the QP.

Elective 1: Rose

| NOS and Module Details | Theory Duration | Practical Duration | On-the-Job Training Duration (Mandatory) | On-the-Job Training Duration (Recommended) | Total Duration |
|---|------------------------|---------------------------|---|---|-----------------------|
| AGR/N0736: Carryout cultivation of rose flowers NOS Version- 1.0 NSQF Level- 2 | 20:00 | 40:00 | 0:00 | 0:00 | 60:00 |
| Module 7: Process of carrying out cultivation of rose flowers | 20:00 | 40:00 | 0:00 | 0:00 | 60:00 |
| Total Duration | 20:00 | 40:00 | 0:00 | 0:00 | 60:00 |

Elective 2: Gerbera

| NOS and Module Details | Theory Duration | Practical Duration | On-the-Job Training Duration (Mandatory) | On-the-Job Training Duration (Recommended) | Total Duration |
|--|-----------------|--------------------|--|--|----------------|
| AGR/N0737: Carryout cultivation of gerbera flowers NOS Version- 1.0 NSQF Level- 2 | 20:00 | 40:00 | 0:00 | 0:00 | 60:00 |
| Module 8: Process of carrying out cultivation of gerbera flowers | 20:00 | 40:00 | 0:00 | 0:00 | 60:00 |
| Total Duration | 20:00 | 40:00 | 0:00 | 0:00 | 60:00 |

Elective 3: Chrysanthemum

| NOS and Module Details | Theory Duration | Practical Duration | On-the-Job Training Duration (Mandatory) | On-the-Job Training Duration (Recommended) | Total Duration |
|--|-----------------|--------------------|--|--|----------------|
| AGR/N0738: Carryout cultivation of chrysanthemum flowers NOS Version- 1.0 NSQF Level- 2 | 20:00 | 40:00 | 0:00 | 0:00 | 60:00 |
| Module 9: Process of carrying out cultivation of chrysanthemum flowers | 20:00 | 40:00 | 0:00 | 0:00 | 60:00 |
| Total Duration | 20:00 | 40:00 | 0:00 | 0:00 | 60:00 |

Elective 4: Orchid

| NOS and Module Details | Theory Duration | Practical Duration | On-the-Job Training Duration (Mandatory) | On-the-Job Training Duration (Recommended) | Total Duration |
|---|-----------------|--------------------|--|--|----------------|
| AGR/N0739: Carryout cultivation of orchid flowers NOS Version- 1.0 NSQF Level- 2 | 20:00 | 40:00 | 0:00 | 0:00 | 60:00 |
| Module 10: Process of carrying out cultivation of orchid flowers | 20:00 | 40:00 | 0:00 | 0:00 | 60:00 |
| Total Duration | 20:00 | 40:00 | 0:00 | 0:00 | 60:00 |

Elective 5: Marigold

| NOS and Module Details | Theory Duration | Practical Duration | On-the-Job Training Duration (Mandatory) | On-the-Job Training Duration (Recommended) | Total Duration |
|--|-----------------|--------------------|--|--|----------------|
| AGR/N0740: Carryout cultivation of marigold flowers NOS Version- 1.0 NSQF Level- 2 | 20:00 | 40:00 | 0:00 | 0:00 | 60:00 |
| Module 11: Process of carrying out cultivation of marigold flowers | 20:00 | 40:00 | 0:00 | 0:00 | 60:00 |
| Total Duration | 20:00 | 40:00 | 0:00 | 0:00 | 60:00 |

Module Details

Module 1: Introduction to the role of a Flower Grower

Bridge Module, Mapped to AGR/N0732 v1.0

Terminal Outcomes:

- Discuss the job role of a Flower Grower.

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

Module 2: Process for preparing for the cultivation of flower crop

Mapped to AGR/N0732 v1.0

Terminal Outcomes:

- Describe the process of selecting the site and flower varieties to be grown.
- Describe the process of arranging the required resources.
- Demonstrate the process of preparing the field for flower cultivation.

| Duration: 10:00 | Duration: 15:00 |
|---|---|
| Theory – Key Learning Outcomes | Practical – Key Learning Outcomes |
| <ul style="list-style-type: none"> • Explain the criteria for selecting a site for flower cultivation such as the recommended temperature, atmospheric humidity, and various limiting factors such as strong winds and hailstorms. • List various inputs required for flower cultivation. • Explain the soil requirements for growing different types of flowers. • Explain the criteria for selecting the relevant varieties of flower crop to be grown such as the climatic conditions, soil type, market demand and profitability. • Describe the process of procuring planting material and storing it appropriately. • Explain the importance of getting the soil tested through an approved lab to identify its treatment requirements. • Explain various treatments to be applied to the soil to improve its fertility, and adjust the pH, alkalinity and salinity levels. • Explain the importance of mixing sand and farmyard manure in the soil. • Explain the importance of creating drains in the field for the effective drainage of water. • Explain the importance of erecting fences around the field to protect it from animals. | <ul style="list-style-type: none"> • Demonstrate the process of applying the appropriate treatment to the soil as per the lab's recommendation. • Demonstrate how to remove all roots, debris, and waste materials from the field. • Demonstrate how to till the field to the required depth using the relevant farm machineries and mix sand in the soil in the prescribed quantity. • Show how to level the field appropriately. • Demonstrate the process of carrying out soil fumigation to prevent the growth of soil-borne pathogens. • Demonstrate the process of preparing ridges and furrows of the recommended dimensions and applying the recommended fertilisers to them. • Demonstrate the process of preparing sunken, level or raised nursery beds according to the requirement for raising saplings. • Demonstrate the process of installing the irrigation or fertigation system in the field. • Show how to create drains in the field for the effective drainage of water. • Show how to erect fences around the field to protect it from animals. |
| Classroom Aids | |

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

Tools, Equipment and Other Requirements

Tractor, Leveller, Soil Sampling Equipment, Soil Testing Instruments, Spade

Module 3: Process of propagating flower plant saplings

Mapped to ARG/N0733 v1.0

Terminal Outcomes:

- Demonstrate the process of propagating saplings through seeds.
- Demonstrate the process of propagating saplings through the cutting method, division method, layering and budding method.

| Duration: 10:00 | Duration: 20:00 |
|---|---|
| Theory – Key Learning Outcomes | Practical – Key Learning Outcomes |
| <ul style="list-style-type: none"> • Explain the importance and process of preparing the seedbed according to the local conditions. • Explain the importance of using treated soil for raising saplings. • Explain the importance of sowing seeds in the seedbed, polybags and containers at the recommended depth. • State the recommended quantity of water and organic or inorganic fertilisers to be applied to the sown seeds. • State the recommended period for maintaining saplings in the seedbed, polybags or containers before being harvested. • Explain the importance and process of acclimatizing saplings before transplanting them. • Explain the importance and process of extracting cuttings from a healthy plant and using them to propagate saplings. • Explain the importance of maintaining the required level of moisture and sunlight exposure for propagating saplings. • Explain the criteria for selecting a plant for extracting cuttings or roots. • Explain different ways of layering to propagate plants such as stem layering, tip layering and trunk layering. • State the approved pesticides and | <ul style="list-style-type: none"> • Demonstrate how to sort out the poor-quality or damaged seeds. • Demonstrate the process of carrying out the pre-sowing treatment of seeds. • Demonstrate the process of preparing the seedbed according to the local conditions. • Show how to fill in the polybags and containers with the recommended quantity of treated soil. • Demonstrate the process of sowing seeds in the seedbed, poly bags and containers at the recommended depth. • Demonstrate the process of applying the recommended quantity of water and organic or inorganic fertilisers on the sown seeds. • Demonstrate how to harvest and acclimatise the saplings before transplanting. • Show how to extract stems of the recommended specifications from the plant. • Demonstrate how to use rooting mixtures and plant growth hormones in appropriate quantities. • Show how to create root divisions from the plant's root. • Demonstrate the process of using the root divisions to propagate plants maintaining the recommended conditions. |

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| <p>insecticides to be used on saplings to protect them from pests and diseases.</p> | <ul style="list-style-type: none"> • Demonstrate the process of applying the recommended quantity of water and fertilisers to support the growth of roots. • Demonstrate the process of preparing the rootstock for budding. • Show how to cut a bud-stick from a healthy and disease-free plant with the required characteristics. • Demonstrate the process of preparing and using bud-scion to propagate plants. • Demonstrate the process of applying the approved pesticides and insecticides to protect the saplings from pests and diseases. |
| Classroom Aids | |
| Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop | |
| Tools, Equipment and Other Requirements | |
| NA | |

Module 4: Process of harvesting, transplanting and maintaining saplings to grow flowers

Mapped to AGR/N0734 v1.0

Terminal Outcomes:

- Demonstrate the process of harvesting and transplanting the saplings.
- Describe the process of maintaining the flower plants and flowers.
- Demonstrate various practices for effective resource optimisation.
- Demonstrate various waste management practices.

| Duration: 10:00 | Duration: 20:00 |
|---|---|
| Theory – Key Learning Outcomes | Practical – Key Learning Outcomes |
| <ul style="list-style-type: none"> • State the indicators of maturity of a variety of saplings for being harvested. • List the relevant tools, implements and accessories required for harvesting and collecting saplings. • Explain the importance of transplanting saplings at the recommended planting depth and density. • Explain the importance of watering saplings with the recommended quantity and applying appropriate organic or inorganic fertilisers soon after transplanting. • Explain the importance of installing support such as bamboo sticks to train and support the saplings. • Explain the importance of protecting saplings from strong winds and excessive heat or cold. • Explain the importance of watering the plants with the recommended quantity, as per the irrigation schedule and prevailing weather conditions. • State various practices to be followed to protect the plants and flowers from pests and diseases. • Explain the use of a variety of organic preparations, pesticides, insecticides and fungicides for treating the | <ul style="list-style-type: none"> • Demonstrate the process of harvesting and collecting the saplings in appropriate baskets or containers, ensuring no damage to them. • Demonstrate the process of transplanting the saplings in the field using the appropriate tools and implements, at the recommended planting depth and density. • Show how to water the saplings with the recommended quantity and apply the recommended organic or inorganic fertilisers appropriately soon after transplanting. • Demonstrate the process of installing support such as bamboo sticks to train and support the saplings. • Demonstrate the process of applying the recommended organic and inorganic fertilisers in the prescribed quantity for the optimum growth of plants. • Show how to water the plants with the recommended quantity, as per the irrigation schedule and prevailing weather conditions. • Demonstrate the process of applying the recommended organic preparations and/ or pesticides, insecticides or fungicides to treat the infected plants and flowers. • Demonstrate the process of carrying out pruning to remove dead and |

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| <p>infected plants and flowers.</p> <ul style="list-style-type: none"> • Explain the importance and process of pruning different types of flower plants. • Explain the use of mulch to prevent the growth of weeds and improve soil fertility. • Describe the process of weeding out unwanted plants. • Explain the importance of draining out water accumulated in the field to prevent root rot among the flower crop plants. • Explain the benefits of resource optimisation. • Explain the importance of recycling and disposing different types of waste as per the applicable regulations. | <p>unwanted leaves and branches from plants.</p> <ul style="list-style-type: none"> • Show how to apply mulch in the field to prevent weed growth. • Demonstrate the process of carrying out weeding to remove unwanted plants. • Show how to drain out any water accumulated in the field to prevent root rot among the flower crop plants. • 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. |
| Classroom Aids | |
| Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop | |
| Tools, Equipment and Other Requirements | |
| Fertilisers, Plant Protection Chemicals, Sprayer Machine, Gloves, Tractor and Other Implements, Irrigation Equipment | |

Module 5: Process of carrying out harvesting and post-harvest management of flower crop

Mapped to NOS AGR/N0735 v1.0

Terminal Outcomes:

- Demonstrate the process of harvesting the flower crop.
- Demonstrate the process of carrying out post-harvest management.
- Demonstrate the process of preparing the storage area and storing the flower crop.
- Describe the process of marketing the flower crop.

| Duration: 15:00 | Duration: 15:00 |
|--|--|
| Theory – Key Learning Outcomes | Practical – Key Learning Outcomes |
| <ul style="list-style-type: none"> • Explain the maturity indicators for varieties of flowers. • Explain various techniques for harvesting the flower crop. • Explain the criteria for sorting and grading the harvested flowers. • State the recommended temperature and humidity for storing flowers. • Describe the process of identifying the market demand for the flower crop, connecting with potential buyers and negotiating with them. • List different types of packing material suitable for flowers. • State the appropriate mode of transport for safe and hygienic delivery of flowers. • Explain the importance and process of maintaining the record of sales and payments. | <ul style="list-style-type: none"> • Demonstrate the process of harvesting the flower crop following the recommended harvesting technique, ensuring no damage to flowers. • Demonstrate the process of carrying out precooling of flowers to remove the field heat. • Show how to sort and grade the harvested flowers on the basis of applicable parameters such as appearance, size, stem thickness etc. • Demonstrate the process of applying the relevant treatment in the storage area to remove any pests, insects and rodents. • Demonstrate the process of preparing and applying the preservative solution on flowers to protect their freshness. • Show how to condition the flowers and pack them safely. • Demonstrate the use of relevant e-payment methods to process the payments. • Prepare a sample record of sales and payments. |
| Classroom Aids: | |
| Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop | |
| Tools, Equipment and Other Requirements | |
| Transportation, Vehicle, Packing Materials- Scissor, Polythene, Storage Infrastructure | |

Module 6: 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

Module 7: Process of carrying out cultivation of rose flowers

Mapped to AGR/N0736 v1.0

Terminal Outcomes:

- Describe the process of selecting the site and preparing the soil.
- Describe the process of selecting the rose variety and propagation method.
- Demonstrate the process of harvesting and transplanting the saplings.
- Describe the process of maintaining the rose plants.
- Demonstrate the process of carrying out harvesting and 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 criteria for selecting a site for rose crop cultivation. • State the recommended soil characteristics required for the cultivation of rose. • Explain the criteria for selecting an appropriate variety of roses to be grown according to the region. • Describe different methods of propagating rose saplings, such as seeding, budding, cutting, etc. • Explain different signs of pests and disease infestation in rose plants and their recommended treatment. • Explain the importance and process of pruning rose plants. • Explain the importance and process of carrying out weeding to remove unwanted plants growing among rose plants. • State the recommended quantity of water to irrigate the rose plants and the applicable irrigation schedule. • State the recommended organic and inorganic fertilisers to be used for the rose crop. • Explain the importance and process of defoliation to induce flowering in rose plants. • Explain the indicators of the readiness of rose flowers for being | <ul style="list-style-type: none"> • Demonstrate how to mix sand and farmyard manure in the soil in the quantity recommended for the rose flower crop. • Demonstrate the process of harvesting the rose saplings from the nursery bed when they are ready for being transplanted. • Demonstrate the process of transplanting rose saplings in the field at the recommended planting density, protecting them from damage. • Demonstrate the process of applying the recommended organic and inorganic fertilisers to the rose saplings appropriately and water them with the required quantity immediately after transplanting. • Demonstrate the process of applying the recommended pesticide or insecticide as per the prescription. • Demonstrate the process of carrying out pruning of rose plants using the appropriate implements. • Demonstrate the process of carrying out weeding regularly to remove unwanted plants growing among rose plants. • Show how to water the rose plants with the recommended quantity as per the irrigation schedule. • Demonstrate the process of applying |

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| <p>harvested.</p> <ul style="list-style-type: none"> • Explain the use of appropriate implements such as secateurs for harvesting the rose flowers. • Explain the importance of ensuring no damage to flowers during harvesting. • State the recommended temperature and humidity for storing the harvested rose flowers. • Explain the applicable criteria for sorting and grading the harvested rose flowers. | <p>the recommended organic and inorganic fertilisers in the prescribed quantity.</p> <ul style="list-style-type: none"> • Demonstrate the process of carrying out defoliation according to the rose variety to induce flowering. • Demonstrate the process of harvesting rose flowers, ensuring no damage to the flowers and plants. • Show how to collect the harvested rose flowers in appropriate baskets or crates. • Show how to sort and grade rose flowers on the basis of applicable parameters. • Demonstrate the process of preparing and applying the preservative solution to the rose flowers to preserve their freshness. • Demonstrate the process of bunching and packing rose flowers. • Prepare a sample manual and/ or electronic record of harvesting and processing of rose flowers using the physical registers and/ or the relevant computer application. |
| Classroom Aids | |
| Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop | |
| Tools, Equipment and Other Requirements | |
| Hand Cultivator, Harrow, Spade, Secateurs, Hand Trowel, Garden Fork, Sprinklers, Rake, Pruning Saw, Spray Pumps, Grass Shear, Budding and Grafting Knives, etc. | |

Module 8: Process of carrying out cultivation of gerbera flowers

Mapped to AGR/N0737 v1.0

Terminal Outcomes:

- Describe the process of selecting the site and preparing the soil.
- Describe the process of selecting the gerbera variety and propagation method.
- Demonstrate the process of propagating, harvesting and transplanting the saplings.
- Describe the process of maintaining the gerbera plants.
- Demonstrate the process of carrying out harvesting and 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 criteria for selecting a site for gerbera crop cultivation such as temperature, shading, ventilation, etc. • State the recommended soil characteristics required for the cultivation of gerbera. • Explain the criteria for selecting the appropriate variety of gerbera to be grown according to the region. • Explain the importance of mixing sand and farmyard manure in the soil in the quantity recommended for gerbera flower crop. • Describe different methods of propagating gerbera saplings such as seeding, or cutting of side shoots and suckers. • Explain the importance of protecting the gerbera saplings from excessive heat and strong winds. • State the immediate care to be given to saplings after being transplanted. • Describe the process of installing support for gerbera plants and training them. • State the recommended irrigation schedule for gerbera plants. • Explain the importance and process of weeding out unwanted plants growing among gerbera plants. • Explain different signs of pests and | <ul style="list-style-type: none"> • Demonstrate how to disinfect the soil with the recommended chemicals. • Demonstrate the process of applying plastic sheet cover on the soil and water it thoroughly after the recommended duration to wash away the disinfectants. • Show how to mix sand and farmyard manure in the soil in the quantities recommended for the gerbera flower crop. • Demonstrate the process of propagating gerbera saplings in the required quantity in the nursery. • Demonstrate the process of harvesting the gerbera saplings from the nursery bed. • Demonstrate the process of transplanting gerbera saplings in the field at the recommended planting density. • Show how to water the saplings with the recommended quantity and apply fertilisers in an appropriate quantity immediately after transplanting. • Demonstrate the process of installing support for the gerbera plants and training them. • Show how to water the gerbera plants with the recommended quantity as per the irrigation schedule. |

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| <p>disease infestation in gerbera plants and their recommended treatment.</p> <ul style="list-style-type: none"> • Explain the importance of pruning gerbera plants at appropriate intervals. • State the recommended organic and inorganic fertilisers to be used for the gerbera crop. • Explain the importance and process of raking the soil in the field to facilitate easy absorption of water and fertilisers, and providing air to the roots. • State the indicators of the readiness of gerbera flowers for being harvested. • Explain the use of appropriate implements such as secateurs for harvesting the gerbera flowers. • Explain the importance of ensuring no damage to flowers during harvesting. • Explain the importance of maintaining the harvested gerbera flowers in freshly chlorinated water and storing them at the recommended temperature and humidity. • Explain the applicable criteria for sorting and grading the harvested gerbera flowers. • Explain the practice of soaking gerbera flower stalks in Sodium Hypochlorite solution for the recommended duration to improve their vase life. | <ul style="list-style-type: none"> • Demonstrate the process of carrying out weeding to remove unwanted plants. • Demonstrate the process of applying the recommended pesticide or insecticide as per the prescription. • Demonstrate the process of carrying out pruning of gerbera plants using the appropriate implements. • Demonstrate the process of applying the recommended organic and inorganic fertilisers in the prescribed quantity. • Show how to rake the soil in the field at the recommended intervals to facilitate easy absorption of water and fertilisers. • Demonstrate the process of harvesting and collecting gerbera flowers. • Demonstrate the process of sorting and grading gerbera flowers on the basis of applicable parameters. • Demonstrate the process of preparing and applying the preservative solution to the gerbera flowers to preserve their freshness. • Demonstrate the process of bunching the gerbera flowers and packing them using poly pouches and carton boxes in layers. • Prepare a sample manual and/ or electronic record of harvesting and processing of gerbera flowers using the physical registers and/ or the relevant computer application. |
| Classroom Aids | |
| Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop | |
| Tools, Equipment and Other Requirements | |
| Hand Cultivator, Harrow, Spade, Secateurs, Hand Trowel, Garden Fork, Sprinklers, Rake, Pruning Saw, Spray Pumps, Grass Shear, Budding and Grafting Knives, etc. | |

Module 9: Process of carrying out cultivation of chrysanthemum flowers

Mapped to AGR/N0738 v1.0

Terminal Outcomes:

- Describe the process of selecting the site and preparing the field.
- Describe the process of selecting the chrysanthemum variety and propagation method.
- Demonstrate the process of propagating, harvesting and transplanting the saplings.
- Describe the process of maintaining the chrysanthemum plants.
- Demonstrate the process of carrying out harvesting and 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 criteria for selecting a site for chrysanthemum crop cultivation such as temperature, relative humidity, adequate exposure to sunlight, etc. • State the recommended soil characteristics required for the cultivation of chrysanthemum. • Explain the criteria for selecting the appropriate variety of chrysanthemum to be grown according to the region. • Explain the importance of mixing sand and farmyard manure in the soil in the quantity recommended for the chrysanthemum flower crop. • Describe different methods of propagating chrysanthemum saplings such as terminal cutting or suckers. • Explain the importance of protecting the chrysanthemum saplings from excessive heat and strong winds. • State the immediate care to be given to saplings after being transplanted. • State the recommended irrigation schedule for chrysanthemum plants. • Explain the importance and process of weeding out unwanted plants growing among chrysanthemum plants. • Explain different signs of pests and disease infestation in | <ul style="list-style-type: none"> • Demonstrate the process of carrying out ploughing and harrowing in the field using the relevant farm machineries and applying farmyard manure in the recommended quantity. • Demonstrate the process of applying the recommended chemicals to the soil as per the prescription to disinfect the soil. • Demonstrate the process of applying plastic sheet cover on the soil and water it thoroughly after the recommended duration to wash away the disinfectants. • Demonstrate the process of installing the appropriate irrigation or fertigation system in the field. • Show how to create drains in the field for effective drainage of water. • Demonstrate how to propagate chrysanthemum saplings in the required quantity in the nursery. • Demonstrate the process of harvesting the chrysanthemum saplings from the nursery bed when they are ready for being transplanted. • Show how to transplant chrysanthemum saplings in the field at the recommended planting density. • Show how to water the saplings with the recommended quantity and apply |

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| <p>chrysanthemum plants and their recommended treatment.</p> <ul style="list-style-type: none"> • Explain the importance of pruning chrysanthemum plants at appropriate intervals. • State the recommended organic and inorganic fertilisers to be used for the chrysanthemum crop. • Explain the importance and process of raking the soil in the field to facilitate easy absorption of water and fertilisers, and providing air to the roots. • Explain the indicators of the readiness of chrysanthemum flowers for being harvested. • Explain the use of appropriate implements such as secateurs for harvesting the chrysanthemum flowers. • Explain the importance of ensuring no damage to flowers during harvesting. • Explain the importance of maintaining the harvested chrysanthemum flowers in freshly chlorinated water and storing them at the recommended temperature and humidity. • Explain the applicable criteria for sorting and grading the harvested chrysanthemum flowers. | <p>fertilisers in an appropriate quantity immediately after transplanting.</p> <ul style="list-style-type: none"> • Demonstrate the process of applying the recommended organic and inorganic fertilisers in the prescribed quantity at appropriate intervals. • Demonstrate the process of applying the recommended pesticide or insecticide as per the prescription. • Show how to water the chrysanthemum plants with the recommended quantity as per the irrigation schedule and prevailing weather conditions. • Show how to drain out any water accumulated in the field. • Demonstrate the process of carrying out pinching to induce the growth of lateral branches and installing appropriate support to train the plants. • Demonstrate the process of carrying out disbudding, removing buds from the stems of plants and leaving only terminal buds to ensure the growth of large blooms. • Demonstrate the process of carrying out pruning of chrysanthemum plants using the appropriate implements at regular intervals, removing the side suckers. • Demonstrate the process of carrying out weeding at the recommended intervals to remove unwanted plants growing among the chrysanthemum plants. • Show how to harvest and collect chrysanthemum flowers ensuring no damage to them and plants. • Demonstrate how to sort and grade chrysanthemum flowers on the basis of applicable parameters. • Demonstrate the process of preparing and applying the preservative solution on the chrysanthemum flowers to preserve |
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| | <p>their freshness.</p> <ul style="list-style-type: none"> • Demonstrate the process of bunching the chrysanthemum flowers and packing them using appropriate packing material such as bamboo baskets or gunny bags. • Prepare a sample manual and/ or electronic record of harvesting and processing of chrysanthemum flowers using the physical registers and/ or the relevant computer application. |
| Classroom Aids | |
| Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop | |
| Tools, Equipment and Other Requirements | |
| Hand Cultivator, Harrow, Spade, Secateurs, Hand Trowel, Garden Fork, Sprinklers, Rake, Pruning Saw, Spray Pumps, Grass Shear, Budding and Grafting Knives, etc. | |

Module 10: Process of carrying out cultivation of orchid flowers

Mapped to AGR/N0739 v1.0

Terminal Outcomes:

- Describe the process of selecting the site and preparing for orchid flower cultivation.
- Demonstrate the process of propagating orchid plants.
- Describe the process of maintaining the orchid plants.
- Demonstrate the process of carrying out harvesting and 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 criteria for selecting a site for orchid crop cultivation such as moderate temperature and humidity along with good ventilation, and moderate sunlight exposure, etc. • List various inputs required for orchid flower cultivation. • Explain the criteria for selecting the appropriate variety of orchids to be grown according to the region. • Explain the importance of ensuring drainage holes in the pots for the drainage of excess water. • State the recommended depth and density for planting orchid seeds in pots. • State the appropriate temperature and humidity to be maintained to induce the germination of orchid seeds. • Explain the importance of protecting the orchid plants from strong winds and direct sunlight. • State their prescribed quantity of recommended organic and inorganic fertilisers to be used with orchid plants. • Explain the use of recommended growth regulators. • List various signs of pests and disease in orchid plants. • State the water requirements of orchid plants and the recommended | <ul style="list-style-type: none"> • Demonstrate how to prepare a green shade net house or polyhouse to provide sunlight to orchid flower plants through shades. • Demonstrate how to prepare the growth media using the recommended materials and fill in the pots with its recommended quantity. • Demonstrate the process of planting the orchid seeds in pots at the recommended depth and density. • Demonstrate the process of installing support in the pots such as bamboo sticks to help the orchid plants grow vertically. • Demonstrate the process of applying the recommended organic and inorganic fertilisers to orchid plants in the prescribed quantity. • Show how to spray the recommended pesticide or insecticide on orchid plants as per the prescription. • Show how to water the orchid plants with the recommended quantity as per the irrigation schedule. • Demonstrate how to remove the dead leaves from orchid plants and weeds from the pots. • Demonstrate the process of harvesting the orchid flowers with or without stalk as per the requirement and collecting them in baskets or |

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| <p>irrigation schedule.</p> <ul style="list-style-type: none"> • Explain the importance of ensuring no accumulation of water in the orchid plant pots to prevent root rot. • Explain the importance of removing the dead leaves from orchid plants and weeds from the pots. • Explain the importance of maintaining orchid plants in moderate temperature, recommended humidity and good air circulation. • Explain the indicators of the readiness of orchid flowers for being harvested. • Explain the use of appropriate implements such as secateurs to harvest orchid flowers with or without stalk, ensuring no damage to flowers and stalk. • Explain the applicable criteria for sorting and grading the harvested orchid flowers. • Explain the practice of soaking orchid flower stalks in Sodium Hypochlorite solution for the recommended duration to improve their vase life. | <p>crates, ensuring no damage to the flowers.</p> <ul style="list-style-type: none"> • Demonstrate the process of sorting and grading the harvested orchid flowers on the basis of applicable parameters. • Show how to prepare and apply the preservative solution on the orchid flowers to preserve their freshness. • Demonstrate the process of bunching the orchid flowers and packing them using appropriate packing material such as bamboo baskets or gunny bags. • Prepare a sample record of harvesting and processing of orchid flowers. |
| Classroom Aids | |
| Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop | |
| Tools, Equipment and Other Requirements | |
| Hand Cultivator, Harrow, Spade, Secateurs, Hand Trowel, Garden Fork, Sprinklers, Rake, Pruning Saw, Spray Pumps, Grass Shear, Budding and Grafting Knives, etc. | |

Module 11: Process of carrying out cultivation of marigold flowers

Mapped to AGR/N0740 v1.0

Terminal Outcomes:

- Describe the process of selecting the site and preparing the field.
- Describe the process of selecting the marigold variety and propagation method
- Demonstrate the process of propagating, harvesting and transplanting the saplings.
- Describe the process of maintaining the marigold plants.
- Demonstrate the process of carrying out harvesting and 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 criteria for selecting a site for marigold crop cultivation such as recommended temperature, exposure to the sunlight and not being prone to waterlog. • Explain the characteristics of soil suitable for marigold cultivation such as the recommended alkalinity, salinity, acidity and pH levels. • Explain the importance of creating drains in the field for effective drainage of water. • Explain the criteria for selecting an appropriate variety of marigolds to be grown according to the region. • Explain the importance of mixing sand and farmyard manure in the soil in the quantity recommended for the marigold flower crop. • Explain the criteria for selecting an appropriate variety of marigolds to be grown according to the region. • Describe different methods of propagating marigold saplings such as terminal seeding or cuttings. • Explain the importance of protecting the marigold saplings from excessive heat/ cold and strong winds. • Explain the importance of maintaining the recommended moisture levels in the nursery bed for | <ul style="list-style-type: none"> • Demonstrate the process of carrying out ploughing and harrowing in the field, and creating ridges and furrows of recommended dimensions. • Demonstrate the process of applying farmyard manure in the field in the recommended quantity. • Show how to disinfect the soil using the recommended chemicals as per the prescription. • Demonstrate the process of installing the appropriate irrigation or fertigation system in the field. • Show how to create drains in the field for effective drainage of water. • Demonstrate how to treat the marigold seeds with the recommended pesticide or insecticide before sowing. • Demonstrate the process of propagating marigold saplings in the required quantity in the nursery. • Show how to harvest the marigold saplings from the nursery bed they when are ready for being transplanted. • Demonstrate the process of transplanting marigold saplings in the field at the recommended depth and planting density. |

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| <p>optimum growth of marigold saplings.</p> <ul style="list-style-type: none"> • State immediate care to be given to saplings after being transplanted. • State the recommended irrigation schedule for marigold plants. • Explain the practice of pinching to induce the growth of lateral branches and installing appropriate support to train the plants. • Explain the importance and process of weeding out unwanted plants growing among marigold plants. • Explain different signs of pests and disease in marigold plants and their recommended treatment. • Explain the importance of removing dead leaves and branches from marigold plants. • State the recommended organic and inorganic fertilisers to be used for the marigold flower crop. • State the indicators of the readiness of marigold flowers for being harvested. • Explain the use of appropriate implements such as secateurs for harvesting the marigold flowers. • Explain the importance of ensuring no damage to flowers during harvesting. • Explain the applicable criteria for sorting and grading the harvested marigold flowers. | <ul style="list-style-type: none"> • Show how to press soil around the root zone to avoid the formation of air pockets. • Show how to water the saplings with the recommended quantity and apply fertilisers in an appropriate quantity immediately after transplanting. • Demonstrate the process of applying the recommended organic and inorganic fertilisers in the prescribed quantity. • Demonstrate the process of applying the recommended pesticide or insecticide as per the prescription. • Show how to water the marigold plants with the recommended quantity as per the irrigation schedule. • Demonstrate how to drain out any water accumulated in the field. • Demonstrate the process of carrying out pinching to induce the growth of lateral branches. • Show how to remove dead leaves and branches from marigold plants. • Demonstrate the process of carrying out weeding at the recommended intervals to remove unwanted plants growing among the marigold plants. • Show how to harvest the marigold flowers with or without stalk as per the market requirements. • Show how to collect the harvested flowers in appropriate baskets or containers and store them at the recommended temperature and humidity. • Demonstrate the process of sorting and grading marigold flowers on the basis of applicable parameters. • Show how to pack the harvested marigold flowers in gunny bags or bamboo baskets. |
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| | <ul style="list-style-type: none"> • Prepare a sample record of harvesting and processing marigold flowers. |
| Classroom Aids | |
| Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop | |
| Tools, Equipment and Other Requirements | |
| Hand Cultivator, Harrow, Spade, Secateurs, Hand Trowel, Garden Fork, Sprinklers, Rake, Pruning Saw, Spray Pumps, Grass Shear, Budding and Grafting Knives, etc. | |

Annexure

Trainer Requirements

| Trainer Prerequisites | | | | | | |
|---|---|------------------------------|----------------------|---|----------------|--|
| Minimum Educational Qualification | Specialization | Relevant Industry Experience | | Training Experience | | Remarks |
| | | Years | Specialization | Years | Specialization | |
| 10 th Class | | 5 | Floriculture farming | 0 | | Floriculturist (Open Cultivation) with 5 Years of experience with 10th Pass. Experience certificate issued by BDO/Agriculture Officer/Head of Gram Panchayat/Loan disbursing bank or financial institution on official letter Head |
| 12 th Class | | 4 | Floriculture farming | 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 | Floriculture farming | 0 | | |
| Graduate | Graduate in any stream except Agriculture/ Horticulture/ Forestry | 2 | Floriculture farming | 0 | | For the school Program minimum qualification of the Trainer should be Graduate (Agriculture / Horticulture / Botany/ Forestry) with minimum 3 years Teaching experience (will be considered industry experience) |
| Graduate | Agriculture/ Horticulture/ Forestry | 0.5 | Floriculture farming | 0 | | |
| Trainer Certification | | | | | | |
| Domain Certification | | | | Platform Certification | | |
| Certified for Job Role “ Flower Grower ”, mapped to QP: “AGR/Q0705, v1.0”, 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/ Horticulture and related streams | 5 | Floriculture/ Horticulture and related experience | 0 | | Practical skills and knowledge required in Floriculture |
| M.Sc | Agriculture/ Botany/ Forestry/ Horticulture and related streams | 2 | Floriculture/ Horticulture and related experience | 0 | | Practical skills and knowledge required in Floriculture |
| PhD | Agriculture/ Botany/ Forestry/ Horticulture and related streams | 1 | Floriculture/ Horticulture and related experience | 0 | | Practical skills and knowledge required in Floriculture |

| Assessor Certification | |
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| Domain Certification | Platform Certification |
| Certified for Job Role “ Flower Grower ”, mapped to QP: “AGR/Q0705, v1.0”, 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 | 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 |
| 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 |