

## Qualification Pack



# Floriculturist

Electives: Rose/ Gerbera/ Chrysanthemum/ Orchid/ Marigold

QP Code: AGR/Q0701

Version: 3.0

NSQF Level: 4

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## Qualification Pack

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### AGR/Q0701: Floriculturist

#### Brief Job Description

A Floriculturist performs various activities in the process of cultivating flower crop such as selecting the site; arranging the required inputs; preparing the field; propagating saplings in the nursery; transplanting the saplings; and maintaining the plants. The person is also responsible for carrying out harvesting, post-harvest management and marketing of the flower crop.

#### Personal Attributes

The individual must be physically fit to work for long durations. The person must have attention to detail and problem-solving skills along with the ability to read and write.

#### Applicable National Occupational Standards (NOS)

##### Compulsory NOS:

1. [AGR/N0701: Prepare for the cultivation of flower crop](#)
2. [AGR/N0718: Propagate flower plant saplings](#)
3. [AGR/N0702: Harvest, transplant and maintain saplings to grow flowers](#)
4. [AGR/N0703: Carry out harvesting and post-harvest management of flower crop](#)
5. [AGR/N9908: Undertake basic entrepreneurial activities for small enterprise](#)
6. [AGR/N9922: Engage in collective farming/activity](#)
7. [AGR/N9903: Maintain health and safety at the workplace](#)
8. [DGT/VSQ/N0102: Employability Skills \(60 Hours\)](#)

##### Electives(mandatory to select at least one):

###### Elective 1: Rose

The OS unit is about the cultivation of rose flowers

1. [AGR/N0719: Carry out cultivation of rose flowers](#)

###### Elective 2: Gerbera

The OS unit is about the cultivation of gerbera flowers

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1. [AGR/N0720: Carry out cultivation of gerbera flowers](#)

### Elective 3: Chrysanthemum

The OS unit is about the cultivation of chrysanthemum flowers.

1. [AGR/N0721: Carry out cultivation of chrysanthemum flowers](#)

### Elective 4: Orchid

The OS unit is about the cultivation of orchid flowers.

1. [AGR/N0722: Carry out cultivation of orchid flowers](#)

### Elective 5: Marigold

The OS unit is about the cultivation of marigold flowers.

1. [AGR/N0723: Carry out cultivation of marigold flowers](#)

## Qualification Pack (QP) Parameters

<b>Sector</b>	Agriculture
<b>Sub-Sector</b>	Agriculture Crop Production
<b>Occupation</b>	Floriculture Farming
<b>Country</b>	India
<b>NSQF Level</b>	4
<b>Credits</b>	21
<b>Aligned to NCO/ISCO/ISIC Code</b>	NCO-2015/6113.0601

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<b>Minimum Educational Qualification &amp; Experience</b>	8th Class with 4 Years of experience relevant experience OR 10th Class (Pass and pursuing continuous regular schooling) OR 10th Class with 2 Years of experience relevant experience OR Certificate-NSQF (Level-4 (Field Crop/Vegetable)) with 6 Months of experience relevant experience
<b>Minimum Level of Education for Training in School</b>	
<b>Pre-Requisite License or Training</b>	NA
<b>Minimum Job Entry Age</b>	17 Years
<b>Last Reviewed On</b>	NA
<b>Next Review Date</b>	27/01/2025
<b>NSQC Approval Date</b>	27/01/2022
<b>Version</b>	3.0
<b>Reference code on NQR</b>	2022/AGR/ASCI/06527
<b>NQR Version</b>	1.0

## Qualification Pack

### AGR/N0701: Prepare for the cultivation of flower crop

#### Description

This OS unit is about preparing for the cultivation of flowers which includes the selection of site and flower varieties to be grown, arranging the required resources and field preparation.

#### Scope

The scope covers the following :

- Select the site and flower varieties to be grown
- Arrange the required resources
- Prepare the field for flower cultivation

#### Elements and Performance Criteria

##### *Select the site and flower varieties to be grown*

To be competent, the user/individual on the job must be able to:

- PC1.** select a site with the recommended temperature, atmospheric humidity, sunlight exposure and rainfall, ensuring it is free from limiting factors such as strong winds and hailstorms
- PC2.** ensure the site has the availability of required inputs such as water, electricity and labour, and access to the relevant markets
- PC3.** ensure the soil is well-drained and there is no accumulation of water in the field
- PC4.** identify and select the relevant varieties of flower crop to be grown in the field as per the climatic conditions, soil type, market demand and profitability

##### *Arrange the required resources*

To be competent, the user/individual on the job must be able to:

- PC5.** estimate the requirement of various resources such as seeds, seedlings, pesticides, fertilisers, tools, implements, equipment, etc.
- PC6.** identify and select a relevant vendor based on the quality and price of required resources available with them
- PC7.** purchase the necessary resources in the required quantity and store them appropriately

##### *Prepare the field for flower cultivation*

To be competent, the user/individual on the job must be able to:

- PC8.** co-ordinate with an approved lab to identify the soil and water treatment requirements through testing
- PC9.** apply the appropriate treatment to the soil as per the lab's recommendation to improve its fertility, and adjust the pH and salinity levels
- PC10.** remove all roots, debris, and waste materials from the field
- PC11.** till the field to the required depth using the relevant farm machineries and mix sand in the soil in the prescribed quantity
- PC12.** level the field appropriately
- PC13.** carry out soil fumigation to prevent the growth of soil-borne pathogens

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- PC14.** prepare ridges and furrows of the recommended dimensions and apply the recommended fertilisers to them
- PC15.** prepare sunken, level or raised nursery bed according to the requirement for raising saplings
- PC16.** install an irrigation or fertigation system in the field
- PC17.** create drains in the field for the effective drainage of water
- PC18.** erect fences around the field to protect it from animals

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the criteria for selecting a site for flower cultivation such as the recommended temperature, atmospheric humidity, sunlight exposure and rainfall, and various limiting factors such as strong winds and hailstorms
- KU2.** various inputs required for flower cultivation such as water, electricity, labour, seeds, seedlings, pesticides, fertilisers, implements, tools, implements, equipment, etc.
- KU3.** the soil requirements for growing different types of flowers
- KU4.** the criteria for selecting the relevant varieties of flower crop to be grown such as the climatic conditions, soil type, market demand and profitability
- KU5.** the process of procuring planting material and storing it appropriately
- KU6.** the importance of getting the soil tested through an approved lab to identify its treatment requirements
- KU7.** various treatment to be applied to the soil to improve its fertility, and adjust the pH, alkalinity and salinity levels
- KU8.** the process of clearing, tilling and levelling the field using the relevant farm machineries
- KU9.** the importance of mixing sand and farmyard manure in the soil
- KU10.** the process of carrying out soil fumigation to prevent the growth of soil-borne pathogens
- KU11.** the process of preparing ridges and furrows of the recommended dimensions
- KU12.** the process of preparing sunken, level or raised nursery bed to raise saplings
- KU13.** the process of installing an irrigation or fertigation system in the field
- KU14.** the importance of creating drains in the field for the effective drainage of water
- KU15.** the importance of erecting fences around the field to protect it from animals

## Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** maintain work-related notes and records
- GS2.** read the relevant literature to get the latest updates about the field of work
- GS3.** listen attentively to understand the information/ instructions being shared
- GS4.** communicate politely and professionally
- GS5.** plan and prioritise tasks to ensure timely completion
- GS6.** evaluate all possible solutions to a problem to select the best one

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- GS7.** co-ordinate with the co-workers to achieve the work objectives
- GS8.** identify possible disruptions to work and take appropriate preventive measures
- GS9.** take quick decisions to deal with workplace emergencies or accidents

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### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Select the site and flower varieties to be grown</i>	<b>10</b>	<b>12</b>	-	<b>14</b>
<b>PC1.</b> select a site with the recommended temperature, atmospheric humidity, sunlight exposure and rainfall, ensuring it is free from limiting factors such as strong winds and hailstorms	-	-	-	-
<b>PC2.</b> ensure the site has the availability of required inputs such as water, electricity and labour, and access to the relevant markets	-	-	-	-
<b>PC3.</b> ensure the soil is well-drained and there is no accumulation of water in the field	-	-	-	-
<b>PC4.</b> identify and select the relevant varieties of flower crop to be grown in the field as per the climatic conditions, soil type, market demand and profitability	-	-	-	-
<i>Arrange the required resources</i>	<b>12</b>	<b>12</b>	-	<b>8</b>
<b>PC5.</b> estimate the requirement of various resources such as seeds, seedlings, pesticides, fertilisers, tools, implements, equipment, etc.	-	-	-	-
<b>PC6.</b> identify and select a relevant vendor based on the quality and price of required resources available with them	-	-	-	-
<b>PC7.</b> purchase the necessary resources in the required quantity and store them appropriately	-	-	-	-
<i>Prepare the field for flower cultivation</i>	<b>8</b>	<b>16</b>	-	<b>8</b>
<b>PC8.</b> co-ordinate with an approved lab to identify the soil and water treatment requirements through testing	-	-	-	-
<b>PC9.</b> apply the appropriate treatment to the soil as per the lab's recommendation to improve its fertility, and adjust the pH and salinity levels	-	-	-	-
<b>PC10.</b> remove all roots, debris, and waste materials from the field	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC11.</b> till the field to the required depth using the relevant farm machineries and mix sand in the soil in the prescribed quantity	-	-	-	-
<b>PC12.</b> level the field appropriately	-	-	-	-
<b>PC13.</b> carry out soil fumigation to prevent the growth of soil-borne pathogens	-	-	-	-
<b>PC14.</b> prepare ridges and furrows of the recommended dimensions and apply the recommended fertilisers to them	-	-	-	-
<b>PC15.</b> prepare sunken, level or raised nursery bed according to the requirement for raising saplings	-	-	-	-
<b>PC16.</b> install an irrigation or fertigation system in the field	-	-	-	-
<b>PC17.</b> create drains in the field for the effective drainage of water	-	-	-	-
<b>PC18.</b> erect fences around the field to protect it from animals	-	-	-	-
<b>NOS Total</b>	<b>30</b>	<b>40</b>	-	<b>30</b>

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### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	AGR/N0701
<b>NOS Name</b>	Prepare for the cultivation of flower crop
<b>Sector</b>	Agriculture
<b>Sub-Sector</b>	Agriculture Crop Production
<b>Occupation</b>	Floriculture Farming
<b>NSQF Level</b>	4
<b>Credits</b>	1
<b>Version</b>	3.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	17/11/2025
<b>NSQC Clearance Date</b>	17/11/2022

## Qualification Pack

### AGR/N0718: Propagate flower plant saplings

#### Description

This OS unit is about propagating flower plants in a nursery following a variety of propagation methods for the purpose of transplanting in the field.

#### Scope

The scope covers the following :

- Propagate saplings through seeds
- Propagate saplings through the cutting method
- Propagate saplings through the root division method
- Propagate saplings through the layering and budding method

#### Elements and Performance Criteria

##### *Propagate saplings through seeds*

To be competent, the user/individual on the job must be able to:

- PC1.** sort out the poor-quality or damaged seeds
- PC2.** carry out the pre-sowing treatment of seeds
- PC3.** prepare the seedbed according to the local conditions
- PC4.** fill in the polybags and containers with the recommended quantity of treated soil
- PC5.** sow seeds in the seedbed, poly bags and containers at the recommended depth
- PC6.** apply the recommended quantity of water and organic or inorganic fertilisers on the sown seeds
- PC7.** maintain saplings in the seedbed/ polybags/ containers for the recommended period
- PC8.** harvest and acclimatise the saplings before transplanting

##### *Propagate saplings through the cutting method*

To be competent, the user/individual on the job must be able to:

- PC9.** select a healthy plant to take extract cuttings
- PC10.** extract stems of the recommended specifications from the plant
- PC11.** use stems to propagate plants maintaining the required level of moisture and sunlight exposure
- PC12.** use rooting mixtures and plant growth hormones in appropriate quantities

##### *Propagate saplings through the root division method*

To be competent, the user/individual on the job must be able to:

- PC13.** select a healthy and grown plant for root division
- PC14.** create root divisions from the plant's root
- PC15.** use the root divisions to propagate plants maintaining the recommended conditions

##### *Propagate saplings through the layering and budding method*

To be competent, the user/individual on the job must be able to:

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- PC16.** select an appropriate method of layering according to the type of plant
- PC17.** cover the stem/ tip/ trunk of the plant with soil according to the selected method
- PC18.** apply the recommended quantity of water and fertilisers to support the growth of roots
- PC19.** prepare a rootstock for budding
- PC20.** cut a bud-stick from a healthy and disease-free plant with the required characteristics
- PC21.** prepare and use bud-scion to propagate plants
- PC22.** apply the approved pesticides and insecticides to protect the saplings from pests and diseases

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the process of sorting out poor-quality or damaged seeds
- KU2.** how to carry out pre-sowing treatment of seeds
- KU3.** the importance and process of preparing the seedbed according to the local conditions
- KU4.** the importance of using treated soil for raising saplings
- KU5.** the importance of sowing seeds in the seedbed, polybags and containers at the recommended depth
- KU6.** the recommended quantity of water and organic or inorganic fertilisers to be applied to the sown seeds
- KU7.** the recommended period for maintaining saplings in the seedbed, polybags or containers before being harvested
- KU8.** the importance and process of acclimatising saplings before transplanting them
- KU9.** the importance and process of extracting cuttings from a healthy plant and using them to propagate saplings
- KU10.** the importance of maintaining the required level of moisture and sunlight exposure for propagating saplings
- KU11.** the process of preparing root divisions of a healthy plant and using them for propagating saplings
- KU12.** the criteria for selecting a plant for extracting cuttings or roots
- KU13.** different ways of layering to propagate plants such as stem layering, tip layering and trunk layering
- KU14.** how to prepare a rootstock for budding
- KU15.** how to extract a bud-stick
- KU16.** how to prepare and use bud-scion to propagate plants
- KU17.** the approved pesticides and insecticides to be used on saplings to protect them from pests and diseases

## Generic Skills (GS)

User/individual on the job needs to know how to:

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- GS1.** maintain work-related records
- GS2.** read the health and safety instructions
- GS3.** listen attentively to understand the information/ instructions being shared by the speaker
- GS4.** communicate clearly and politely
- GS5.** plan and prioritise tasks to ensure timely completion
- GS6.** identify possible disruptions to work and take appropriate preventive measures
- GS7.** take quick decisions to deal with workplace emergencies/ accidents
- GS8.** evaluate all possible solutions to a problem to select the best one
- GS9.** co-ordinate with the co-workers to achieve the work objectives

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### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Propagate saplings through seeds</i>	<b>8</b>	<b>12</b>	-	<b>6</b>
<b>PC1.</b> sort out the poor-quality or damaged seeds	-	-	-	-
<b>PC2.</b> carry out the pre-sowing treatment of seeds	-	-	-	-
<b>PC3.</b> prepare the seedbed according to the local conditions	-	-	-	-
<b>PC4.</b> fill in the polybags and containers with the recommended quantity of treated soil	-	-	-	-
<b>PC5.</b> sow seeds in the seedbed, poly bags and containers at the recommended depth	-	-	-	-
<b>PC6.</b> apply the recommended quantity of water and organic or inorganic fertilisers on the sown seeds	-	-	-	-
<b>PC7.</b> maintain saplings in the seedbed/ polybags/ containers for the recommended period	-	-	-	-
<b>PC8.</b> harvest and acclimatise the saplings before transplanting	-	-	-	-
<i>Propagate saplings through the cutting method</i>	<b>6</b>	<b>8</b>	-	<b>4</b>
<b>PC9.</b> select a healthy plant to take extract cuttings	-	-	-	-
<b>PC10.</b> extract stems of the recommended specifications from the plant	-	-	-	-
<b>PC11.</b> use stems to propagate plants maintaining the required level of moisture and sunlight exposure	-	-	-	-
<b>PC12.</b> use rooting mixtures and plant growth hormones in appropriate quantities	-	-	-	-
<i>Propagate saplings through the root division method</i>	<b>4</b>	<b>6</b>	-	<b>4</b>

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC13.</b> select a healthy and grown plant for root division	-	-	-	-
<b>PC14.</b> create root divisions from the plant's root	-	-	-	-
<b>PC15.</b> use the root divisions to propagate plants maintaining the recommended conditions	-	-	-	-
<i>Propagate saplings through the layering and budding method</i>	<b>12</b>	<b>14</b>	-	<b>16</b>
<b>PC16.</b> select an appropriate method of layering according to the type of plant	-	-	-	-
<b>PC17.</b> cover the stem/ tip/ trunk of the plant with soil according to the selected method	-	-	-	-
<b>PC18.</b> apply the recommended quantity of water and fertilisers to support the growth of roots	-	-	-	-
<b>PC19.</b> prepare a rootstock for budding	-	-	-	-
<b>PC20.</b> cut a bud-stick from a healthy and disease-free plant with the required characteristics	-	-	-	-
<b>PC21.</b> prepare and use bud-scion to propagate plants	-	-	-	-
<b>PC22.</b> apply the approved pesticides and insecticides to protect the saplings from pests and diseases	-	-	-	-
<b>NOS Total</b>	<b>30</b>	<b>40</b>	-	<b>30</b>

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### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	AGR/N0718
<b>NOS Name</b>	Propagate flower plant saplings
<b>Sector</b>	Agriculture
<b>Sub-Sector</b>	Agriculture Crop Production
<b>Occupation</b>	Floriculture Farming
<b>NSQF Level</b>	4
<b>Credits</b>	1
<b>Version</b>	2.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	17/11/2025
<b>NSQC Clearance Date</b>	17/11/2022

## Qualification Pack

### AGR/N0702: Harvest, transplant and maintain saplings to grow flowers

#### Description

This OS unit is about harvesting and transplanting saplings, and maintaining the flower plants. It also covers resource optimisation and waste management.

#### Scope

The scope covers the following :

- Harvest the saplings
- Transplant the saplings
- Maintain the flower plants and flowers
- Optimize resource utilization
- Perform waste management

#### Elements and Performance Criteria

##### *Harvest the saplings*

To be competent, the user/individual on the job must be able to:

- PC1.** check the saplings in the nursery to determine their readiness for being harvested
- PC2.** arrange the required tools, implements and accessories for harvesting and collecting the saplings
- PC3.** harvest and collect the saplings in appropriate baskets or containers, ensuring no damage to them

##### *Transplant the saplings*

To be competent, the user/individual on the job must be able to:

- PC4.** transplant the saplings in the field using the appropriate tools and implements, at the recommended planting depth and density, protecting them from damage
- PC5.** water the saplings with the recommended quantity and apply the recommended organic or inorganic fertilisers appropriately soon after transplanting
- PC6.** install support such as bamboo sticks to train and support the saplings
- PC7.** arrange to protect the saplings from strong winds and excessive heat or cold

##### *Maintain the flower plants and flowers*

To be competent, the user/individual on the job must be able to:

- PC8.** apply the recommended organic and inorganic fertilisers in the prescribed quantity for the optimum growth of plants
- PC9.** water the plants with the recommended quantity, as per the irrigation schedule and prevailing weather conditions
- PC10.** follow the recommended measures to protect the plants and flowers from pests and diseases
- PC11.** apply the recommended organic preparations and/ or pesticides, insecticides or fungicides to treat the infected plants and flowers
- PC12.** carry out pruning to remove dead and unwanted leaves and branches from plants
- PC13.** apply mulch in the field to prevent weed growth

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- PC14.** carry out weeding to remove unwanted plants growing among the flower crop, ensuring no damage to the crop
- PC15.** drain out any water accumulated in the field to prevent root rot among the flower crop plants

### *Optimise resource utilisation*

To be competent, the user/individual on the job must be able to:

- PC16.** optimise the usage of water and other resources in various tasks and processes
- PC17.** plug water leakages to prevent its wastage

### *Perform waste management*

To be competent, the user/individual on the job must be able to:

- PC18.** segregate waste into appropriate categories
- PC19.** dispose the non-recyclable waste in an environment-friendly manner and use the recyclable waste appropriately

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the indicators of maturity of a variety of saplings for being harvested
- KU2.** the relevant tools, implements and accessories required for harvesting and collecting saplings
- KU3.** the process of harvesting and collecting saplings, ensuring no damage to them
- KU4.** the importance of transplanting saplings at the recommended planting depth and density
- KU5.** the importance of watering saplings with the recommended quantity and applying appropriate organic or inorganic fertilisers soon after transplanting
- KU6.** the importance of installing support such as bamboo sticks to train and support the saplings
- KU7.** the importance of protecting saplings from strong winds and excessive heat or cold
- KU8.** the process of applying different types of organic and inorganic fertilisers to the soil for the optimum growth of plants
- KU9.** the importance of watering the plants with the recommended quantity, as per the irrigation schedule and prevailing weather conditions
- KU10.** various practices to be followed to protect the plants and flowers from pests and diseases
- KU11.** use of a variety of organic preparations, pesticides, insecticides and fungicides for treating the infected plants and flowers
- KU12.** the importance and process of pruning different types of flower plants
- KU13.** the use of mulch to prevent the growth of weed and improve soil fertility
- KU14.** the process of weeding out unwanted plants
- KU15.** the importance of draining out water accumulated in the field to prevent root rot among the flower crop plants
- KU16.** the benefits and different ways of resource optimisation
- KU17.** the criteria for segregating waste into appropriate categories
- KU18.** the importance of disposing the non-recyclable waste in an environment-friendly manner
- KU19.** how to recycle different types of recyclable waste
- KU20.** the importance of practising inclusion at work and empathising with PwD

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### Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** maintain work-related notes and records
- GS2.** read the relevant literature to get the latest updates about the field of work
- GS3.** listen attentively to understand the information/ instructions being shared
- GS4.** communicate clearly and politely
- GS5.** plan and prioritise tasks to ensure timely completion
- GS6.** evaluate all possible solutions to a problem to select the best one
- GS7.** co-ordinate with the co-workers to achieve the work objectives
- GS8.** identify possible disruptions to work and take appropriate preventive measures
- GS9.** take quick decisions to deal with workplace emergencies/ accidents

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### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Harvest the saplings</i>	<b>8</b>	<b>12</b>	-	<b>6</b>
<b>PC1.</b> check the saplings in the nursery to determine their readiness for being harvested	-	-	-	-
<b>PC2.</b> arrange the required tools, implements and accessories for harvesting and collecting the saplings	-	-	-	-
<b>PC3.</b> harvest and collect the saplings in appropriate baskets or containers, ensuring no damage to them	-	-	-	-
<i>Transplant the saplings</i>	<b>8</b>	<b>8</b>	-	<b>8</b>
<b>PC4.</b> transplant the saplings in the field using the appropriate tools and implements, at the recommended planting depth and density, protecting them from damage	-	-	-	-
<b>PC5.</b> water the saplings with the recommended quantity and apply the recommended organic or inorganic fertilisers appropriately soon after transplanting	-	-	-	-
<b>PC6.</b> install support such as bamboo sticks to train and support the saplings	-	-	-	-
<b>PC7.</b> arrange to protect the saplings from strong winds and excessive heat or cold	-	-	-	-
<i>Maintain the flower plants and flowers</i>	<b>8</b>	<b>10</b>	-	<b>10</b>
<b>PC8.</b> apply the recommended organic and inorganic fertilisers in the prescribed quantity for the optimum growth of plants	-	-	-	-
<b>PC9.</b> water the plants with the recommended quantity, as per the irrigation schedule and prevailing weather conditions	-	-	-	-
<b>PC10.</b> follow the recommended measures to protect the plants and flowers from pests and diseases	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC11.</b> apply the recommended organic preparations and/ or pesticides, insecticides or fungicides to treat the infected plants and flowers	-	-	-	-
<b>PC12.</b> carry out pruning to remove dead and unwanted leaves and branches from plants	-	-	-	-
<b>PC13.</b> apply mulch in the field to prevent weed growth	-	-	-	-
<b>PC14.</b> carry out weeding to remove unwanted plants growing among the flower crop, ensuring no damage to the crop	-	-	-	-
<b>PC15.</b> drain out any water accumulated in the field to prevent root rot among the flower crop plants	-	-	-	-
<i>Optimise resource utilisation</i>	<b>2</b>	<b>4</b>	-	<b>2</b>
<b>PC16.</b> optimise the usage of water and other resources in various tasks and processes	-	-	-	-
<b>PC17.</b> plug water leakages to prevent its wastage	-	-	-	-
<i>Perform waste management</i>	<b>4</b>	<b>6</b>	-	<b>4</b>
<b>PC18.</b> segregate waste into appropriate categories	-	-	-	-
<b>PC19.</b> dispose the non-recyclable waste in an environment-friendly manner and use the recyclable waste appropriately	-	-	-	-
<b>NOS Total</b>	<b>30</b>	<b>40</b>	-	<b>30</b>

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	AGR/N0702
<b>NOS Name</b>	Harvest, transplant and maintain saplings to grow flowers
<b>Sector</b>	Agriculture
<b>Sub-Sector</b>	Agriculture Crop Production
<b>Occupation</b>	Floriculture Farming
<b>NSQF Level</b>	4
<b>Credits</b>	1
<b>Version</b>	3.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	17/11/2025
<b>NSQC Clearance Date</b>	17/11/2022

## Qualification Pack

# AGR/N0703: Carry out harvesting and post-harvest management of flower crop

## Description

This OS unit is about carrying out harvesting and post-harvest management of flower crop.

## Scope

The scope covers the following :

- Harvest the flower crop
- Carry out post-harvest management
- Prepare the storage area and store the flower crop
- Market the flower crop

## Elements and Performance Criteria

### *Harvest the flower crop*

To be competent, the user/individual on the job must be able to:

- PC1.** check the flower crop to determine its readiness for being harvested
- PC2.** arrange the required tools, implements and accessories for harvesting flowers
- PC3.** harvest the flower crop following the recommended harvesting technique, ensuring no damage to flowers

### *Carry out post-harvest management*

To be competent, the user/individual on the job must be able to:

- PC4.** carry out precooling of flowers to remove the field heat
- PC5.** sort and grade the harvested flowers on the basis of applicable parameters such as appearance, size, stem thickness etc.

### *Prepare the storage area and store the flower crop*

To be competent, the user/individual on the job must be able to:

- PC6.** apply the relevant treatment in the storage area to remove any pests, insects and rodents
- PC7.** ensure the storage area is clean and well-ventilated before storing the harvested flowers
- PC8.** prepare and apply the preservative solution on flowers to protect their freshness
- PC9.** store the harvested flowers at the recommended temperature and humidity, ensuring no damage to them

### *Market the flower crop*

To be competent, the user/individual on the job must be able to:

- PC10.** identify the market demand and potential buyers of the harvested flowers
- PC11.** negotiate the price with the buyer
- PC12.** select the appropriate packing material such as bamboo baskets, gunny bags, poly pouches or corrugated boxes according to the type of flowers to be packed and distance to the target market or buyer
- PC13.** condition the flowers and pack them safely

## Qualification Pack

- PC14.** arrange an appropriate mode of transport to safely deliver flowers during transit
- PC15.** use the relevant e-payment method to process the payments
- PC16.** maintain the record of sales and payments

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** maturity indicators for varieties of flowers
- KU2.** various techniques for harvesting the flower crop
- KU3.** the criteria for sorting and grading the harvested flowers
- KU4.** the recommended temperature and humidity for storing flowers
- KU5.** the process of applying relevant treatment in the storage area to remove any pests, insects and rodents
- KU6.** the process of identifying the market demand for flower crop, connecting with potential buyers and negotiating with them
- KU7.** different types of packing material suitable for flowers
- KU8.** the appropriate mode of transport for safe and hygienic delivery of flowers
- KU9.** how to use different types of e-payment methods
- KU10.** the importance and process of maintaining the record of sales and payments

## Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** write work-related notes
- GS2.** communicate politely and professionally
- GS3.** read the relevant literature to learn about new latest developments in the field of work
- GS4.** listen attentively to understand the information/ instructions being shared by the speaker
- GS5.** plan and prioritise tasks to ensure timely completion
- GS6.** co-ordinate with co-workers to achieve work objectives
- GS7.** evaluate all possible solutions to a problem to select the best one
- GS8.** identify possible disruptions to work and take appropriate preventive measures
- GS9.** take quick decisions to deal with workplace emergencies/ accidents

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Harvest the flower crop</i>	<b>6</b>	<b>8</b>	-	<b>6</b>
<b>PC1.</b> check the flower crop to determine its readiness for being harvested	-	-	-	-
<b>PC2.</b> arrange the required tools, implements and accessories for harvesting flowers	-	-	-	-
<b>PC3.</b> harvest the flower crop following the recommended harvesting technique, ensuring no damage to flowers	-	-	-	-
<i>Carry out post-harvest management</i>	<b>4</b>	<b>6</b>	-	<b>8</b>
<b>PC4.</b> carry out precooling of flowers to remove the field heat	-	-	-	-
<b>PC5.</b> sort and grade the harvested flowers on the basis of applicable parameters such as appearance, size, stem thickness etc.	-	-	-	-
<i>Prepare the storage area and store the flower crop</i>	<b>8</b>	<b>8</b>	-	<b>8</b>
<b>PC6.</b> apply the relevant treatment in the storage area to remove any pests, insects and rodents	-	-	-	-
<b>PC7.</b> ensure the storage area is clean and well-ventilated before storing the harvested flowers	-	-	-	-
<b>PC8.</b> prepare and apply the preservative solution on flowers to protect their freshness	-	-	-	-
<b>PC9.</b> store the harvested flowers at the recommended temperature and humidity, ensuring no damage to them	-	-	-	-
<i>Market the flower crop</i>	<b>12</b>	<b>18</b>	-	<b>8</b>
<b>PC10.</b> identify the market demand and potential buyers of the harvested flowers	-	-	-	-
<b>PC11.</b> negotiate the price with the buyer	-	-	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC12.</b> select the appropriate packing material such as bamboo baskets, gunny bags, poly pouches or corrugated boxes according to the type of flowers to be packed and distance to the target market or buyer	-	-	-	-
<b>PC13.</b> condition the flowers and pack them safely	-	-	-	-
<b>PC14.</b> arrange an appropriate mode of transport to safely deliver flowers during transit	-	-	-	-
<b>PC15.</b> use the relevant e-payment method to process the payments	-	-	-	-
<b>PC16.</b> maintain the record of sales and payments	-	-	-	-
<b>NOS Total</b>	<b>30</b>	<b>40</b>	-	<b>30</b>

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	AGR/N0703
<b>NOS Name</b>	Carry out harvesting and post-harvest management of flower crop
<b>Sector</b>	Agriculture
<b>Sub-Sector</b>	Agriculture Crop Production
<b>Occupation</b>	Floriculture Farming
<b>NSQF Level</b>	4
<b>Credits</b>	2
<b>Version</b>	3.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	17/11/2025
<b>NSQC Clearance Date</b>	17/11/2022

## Qualification Pack

### AGR/N9908: Undertake basic entrepreneurial activities for small enterprise

#### Description

This OS unit is about undertaking basic entrepreneurial or business activities in the agriculture sector.

#### Scope

The scope covers the following :

- Plan the agricultural enterprise/ business
- Manage the agricultural production process
- Manage the post-production and marketing processes

#### Elements and Performance Criteria

##### *Plan the agricultural enterprise/ business*

To be competent, the user/individual on the job must be able to:

- PC1.** analyse the demand and supply of the relevant agricultural produce in the market
- PC2.** identify the target customers and assess their needs and expectations with respect to the quality and price of the produce
- PC3.** identify various types of agricultural entrepreneurship/ business opportunities
- PC4.** plan agricultural production with the use of relevant and efficient technologies for availing funds
- PC5.** identify appropriate and authentic advisory services/Government authority for skill upgradation to successfully plan and implement business activities
- PC6.** prepare a basic business plan for the agricultural entrepreneurship/business activities
- PC7.** identify appropriate sources of funding for the agricultural entrepreneurship/ business
- PC8.** coordinate with the relevant government authorities to subscribe to the relevant government schemes and programs to benefit from them
- PC9.** ensure compliance with the government structural reforms and framework along with the applicable rules and regulations while setting up the agricultural enterprise/ business

##### *Manage the agricultural production process*

To be competent, the user/individual on the job must be able to:

- PC10.** select and arrange the necessary resources for the business operations
- PC11.** ensure the use of relevant and efficient production technologies as per planning and availability of funds
- PC12.** follow the recommended practices for efficient input resource management
- PC13.** optimise the production processes and output through the amalgamation of existing practices with smart technologies
- PC14.** follow the recommended sustainability practices during agricultural production to prevent adverse impacts on the environment and produce viz. deforestation, loss of biodiversity, soil degradation, etc.

## Qualification Pack

### *Manage the post-production and marketing processes*

To be competent, the user/individual on the job must be able to:

- PC15.** ensure the availability of proper storage infrastructures and facilities post-production of the produce as per the industry quality standards
- PC16.** collect information related to the wholesale and retail price of produce
- PC17.** calculate the costs incurred and determine the price of the produce for profitability
- PC18.** ensure that the cost of production, transportation, and marketing are considered while calculating the cost and setting the price for the produce
- PC19.** collect information related to various subsidies/funds offered by the government, authorised state units and other financial institutions involved with the promotion of the produce
- PC20.** select appropriate marketing channels for the produce, considering the relevant requirements and constraints
- PC21.** identify various risks to production and post-production processes and manage them appropriately
- PC22.** undertake outreach programs to promote agricultural products and services, and expand agri-business
- PC23.** prepare and execute a marketing plan considering the 4Ps i.e. product, price, promotion, and place and 4As i.e. acceptability, affordability, accessibility, and awareness
- PC24.** use the relevant digital services such as e-commerce, e-payments, electronic record-keeping, etc.
- PC25.** use efficient post-production logistics means to improve the supply quantity, reduce the cost to the consumer, and increase demand consequently
- PC26.** ensure all the relevant information such as quality and quantity of produce, date of manufacture, batch number, and sale is recorded electronically and/ or manually
- PC27.** coordinate with the various stakeholders for efficient and sustainable agri-business growth and development

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** how to analyse the demand and supply of the relevant agricultural produce in the market
- KU2.** the process of identifying the target customers and assess their needs and expectations with respect to the quality and price of the produce
- KU3.** how to identify various types of agricultural entrepreneurship/ business opportunities
- KU4.** how to prepare a basic business plan for the agricultural entrepreneurship/business activities
- KU5.** appropriate sources of funding for the agricultural entrepreneurship/ businesses
- KU6.** the relevant government schemes and programs
- KU7.** the importance of ensuring compliance with the government structural reforms and framework, along with the applicable rules and regulations
- KU8.** various resources required for agricultural production
- KU9.** the process of planning agricultural production and the use of relevant technologies to enhance production

## Qualification Pack

- KU10.** the importance of ensuring no cause adverse impact on the environment and produce during production
- KU11.** the recommended practices to be followed for efficient input resource management
- KU12.** the process of optimising the production processes and output through the amalgamation of existing practices with smart technologies
- KU13.** the recommended sustainability practices to be followed during agricultural production to prevent and deal with deforestation, loss of biodiversity, soil degradation, etc.
- KU14.** how to collect information related to the wholesale and retail price of agricultural produce
- KU15.** how to calculate the economics of the produce viz. production cost, price of the produce, B:C Ratio etc.
- KU16.** relevant government schemes with the provision of subsidies/funds for the promotion of agricultural produce
- KU17.** the process of selecting appropriate marketing channels for marketing agricultural produce, and the applicable requirements and constraints
- KU18.** the relevant buyers of different types of agricultural produce such as co-operatives, retailers, local vendors, wholesalers, e-trading portals, marketing companies, exporters, etc.
- KU19.** how to identify and manage various risks to production and post-production processes
- KU20.** how to undertake outreach programs to promote agricultural products and services, and expand agri-business
- KU21.** the 4Ps i.e. product, price, promotion, and place and 4As i.e. acceptability, affordability, accessibility, and awareness considered while preparing and executing a marketing plan
- KU22.** use of the relevant digital services such as e-commerce, e-payments, electronic record-keeping, etc.
- KU23.** the importance of using efficient post-production logistics
- KU24.** the importance of maintaining various records accurately

## Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** maintain work-related notes and records
- GS2.** read the relevant literature to get the latest updates about the field work
- GS3.** communicate politely and professionally
- GS4.** listen attentively to understand the information being shared
- GS5.** plan and schedule tasks for efficient time management
- GS6.** identify possible disruptions to work and take appropriate preventive measures
- GS7.** take quick decisions to deal with workplace emergencies/ accident
- GS8.** evaluate all possible solutions to a problem to select the best one

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Plan the agricultural enterprise/ business</i>	<b>10</b>	<b>14</b>	-	<b>10</b>
<b>PC1.</b> analyse the demand and supply of the relevant agricultural produce in the market	-	-	-	-
<b>PC2.</b> identify the target customers and assess their needs and expectations with respect to the quality and price of the produce	-	-	-	-
<b>PC3.</b> identify various types of agricultural entrepreneurship/ business opportunities	-	-	-	-
<b>PC4.</b> plan agricultural production with the use of relevant and efficient technologies for availing funds	-	-	-	-
<b>PC5.</b> identify appropriate and authentic advisory services/Government authority for skill upgradation to successfully plan and implement business activities	-	-	-	-
<b>PC6.</b> prepare a basic business plan for the agricultural entrepreneurship/business activities	-	-	-	-
<b>PC7.</b> identify appropriate sources of funding for the agricultural entrepreneurship/ business	-	-	-	-
<b>PC8.</b> coordinate with the relevant government authorities to subscribe to the relevant government schemes and programs to benefit from them	-	-	-	-
<b>PC9.</b> ensure compliance with the government structural reforms and framework along with the applicable rules and regulations while setting up the agricultural enterprise/ business	-	-	-	-
<i>Manage the agricultural production process</i>	<b>8</b>	<b>10</b>	-	<b>8</b>
<b>PC10.</b> select and arrange the necessary resources for the business operations	-	-	-	-
<b>PC11.</b> ensure the use of relevant and efficient production technologies as per planning and availability of funds	-	-	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC12.</b> follow the recommended practices for efficient input resource management	-	-	-	-
<b>PC13.</b> optimise the production processes and output through the amalgamation of existing practices with smart technologies	-	-	-	-
<b>PC14.</b> follow the recommended sustainability practices during agricultural production to prevent adverse impacts on the environment and produce viz. deforestation, loss of biodiversity, soil degradation, etc.	-	-	-	-
<i>Manage the post-production and marketing processes</i>	<b>12</b>	<b>16</b>	-	<b>12</b>
<b>PC15.</b> ensure the availability of proper storage infrastructures and facilities post-production of the produce as per the industry quality standards	-	-	-	-
<b>PC16.</b> collect information related to the wholesale and retail price of produce	-	-	-	-
<b>PC17.</b> calculate the costs incurred and determine the price of the produce for profitability	-	-	-	-
<b>PC18.</b> ensure that the cost of production, transportation, and marketing are considered while calculating the cost and setting the price for the produce	-	-	-	-
<b>PC19.</b> collect information related to various subsidies/funds offered by the government, authorised state units and other financial institutions involved with the promotion of the produce	-	-	-	-
<b>PC20.</b> select appropriate marketing channels for the produce, considering the relevant requirements and constraints	-	-	-	-
<b>PC21.</b> identify various risks to production and post-production processes and manage them appropriately	-	-	-	-
<b>PC22.</b> undertake outreach programs to promote agricultural products and services, and expand agri-business	-	-	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC23.</b> prepare and execute a marketing plan considering the 4Ps i.e. product, price, promotion, and place and 4As i.e. acceptability, affordability, accessibility, and awareness	-	-	-	-
<b>PC24.</b> use the relevant digital services such as e-commerce, e-payments, electronic record-keeping, etc.	-	-	-	-
<b>PC25.</b> use efficient post-production logistics means to improve the supply quantity, reduce the cost to the consumer, and increase demand consequently	-	-	-	-
<b>PC26.</b> ensure all the relevant information such as quality and quantity of produce, date of manufacture, batch number, and sale is recorded electronically and/ or manually	-	-	-	-
<b>PC27.</b> coordinate with the various stakeholders for efficient and sustainable agri-business growth and development	-	-	-	-
<b>NOS Total</b>	<b>30</b>	<b>40</b>	<b>-</b>	<b>30</b>

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	AGR/N9908
<b>NOS Name</b>	Undertake basic entrepreneurial activities for small enterprise
<b>Sector</b>	Agriculture
<b>Sub-Sector</b>	Generic
<b>Occupation</b>	Generic
<b>NSQF Level</b>	4
<b>Credits</b>	1
<b>Version</b>	3.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	25/02/2024
<b>NSQC Clearance Date</b>	25/02/2021

## Qualification Pack

### AGR/N9922: Engage in collective farming/activity

#### Description

This OS unit is about working collectively in Producer Groups (PGs), Farmers Interest Groups (FIGs), Self-Help Groups (SHGs) and other similar groups to attain a common objective.

#### Scope

The scope covers the following :

- Create PGs/ FIGs/ SHGs
- Prepare for the PG/ FIG/ SHG operations
- Conduct group meetings and training sessions
- Carry out collective farming/ activities

#### Elements and Performance Criteria

##### *Create PGs/ FIGs/ SHGs*

To be competent, the user/individual on the job must be able to:

- PC1.** identify farmers/ groups with the common interests in the area
- PC2.** create Producer Groups (PGs)/Farmers Interest Groups (FIGs)/ Self-Help Groups (SHGs), following the applicable rules and regulations

##### *Prepare for the PG/ FIG/ SHG operations*

To be competent, the user/individual on the job must be able to:

- PC3.** organise fundraising activities to support the functioning of the group
- PC4.** establish links with the local government at panchayat level to obtain access to the relevant development programmes and funds
- PC5.** induct subject matter experts (SMEs) in the group
- PC6.** assist in arranging the required Information and Communication Technology (ICT) products for the group
- PC7.** plan the commodity convergence with the relevant developmental programmes
- PC8.** plan optimal production to meet the market and household food security needs

##### *Conduct group meetings and training sessions*

To be competent, the user/individual on the job must be able to:

- PC9.** conduct the initial group meetings to introduce the members, discuss the group objectives, group income-generating enterprises/ activities, methods of operation, etc.
- PC10.** assist in exchanging the domain and technical knowledge such as market or price information, latest technology, and resolving common issues or conflicts through the PG/ FIG/ SHG meetings
- PC11.** organise capacity building exercises such as skill development and training programmes

##### *Carry out collective farming/ activities*

To be competent, the user/individual on the job must be able to:

## Qualification Pack

- PC12.** organise field trials to identify and resolve problems encountered by group members in the field operations
- PC13.** procure/hire advanced and expensive farm machineries/tools and equipment using the group fund for collective use of the group members
- PC14.** establish and manage the group-owned bank of quality seeds/ fertilisers/ pesticides/ tools and equipment, etc.
- PC15.** use the group's credit facility as per the applicable terms and conditions
- PC16.** carry out relevant duties as per own role in the PG/FIG/ SHG such as the group leader/ secretary/ book-keeper, etc.
- PC17.** co-ordinate within the group(s) in procuring inputs in bulk/large-scale farming, packing/transportation/marketing of the produce, etc.
- PC18.** assist in forming forward and backward linkages through the PGs/ FIGs/ SHGs
- PC19.** identify and follow the relevant practices to add value to the produce such as processing, packing, upgrading the quality, etc.
- PC20.** arrange for the regular repair and maintenance of the farm machineries/tools, equipment/tube/bore wells/storage/drying platforms/processing units, etc.
- PC21.** connect and partner with other groups to expand the network and address common problems at a large scale

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the process of preparing for the PG/ FIG/ SHG operations such as fundraising, induction of SMEs, investing in ICT products, etc.
- KU2.** how to establish links with the local government at the panchayat level to obtain access to the relevant development programmes and funds
- KU3.** the process of commodity convergence with the relevant developmental programmes
- KU4.** the importance of planning optimal production to meet the market and household food security needs
- KU5.** the importance of setting the group objectives and deciding the group income-generating enterprises/ activities, methods of operation, benefits, etc.
- KU6.** the importance of organising the PG/FIG/ SHG meetings and training sessions to resolve common concerns and get information about the latest developments in the field of work
- KU7.** the benefits of various capacity building exercises such as skill development and training programmes
- KU8.** the importance and process of conducting field trials to identify and resolve problems encountered by farmers in the field operations
- KU9.** the concept of group-owned bank to provide quality seeds, fertilisers, pesticides, tools and equipment to the member farmers
- KU10.** the process of using the group's credit facility
- KU11.** core collective farming activities such as procuring inputs in bulk, large-scale farming, packing, transportation and marketing of the produce, etc.
- KU12.** the concept and benefits of forming forward and backward linkages

## Qualification Pack

**KU13.** relevant value addition practices such as processing, packing, upgrading the quality, etc.

**KU14.** the benefits of connecting with similar groups to address common problems at a large scale

### Generic Skills (GS)

User/individual on the job needs to know how to:

**GS1.** write relevant notes and reports

**GS2.** read the relevant literature to get latest updates about the field of work

**GS3.** communicate politely and professionally

**GS4.** listen attentively to understand the information being shared

**GS5.** plan tasks for effective use of time

**GS6.** identify possible disruptions to work and take appropriate preventive measures

**GS7.** evaluate all possible solutions to a problem to select the best one

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Create PGs/ FIGs/ SHGs</i>	<b>6</b>	<b>8</b>	-	<b>6</b>
<b>PC1.</b> identify farmers/ groups with the common interests in the area	-	-	-	-
<b>PC2.</b> create Producer Groups (PGs)/Farmers Interest Groups (FIGs)/ Self-Help Groups (SHGs), following the applicable rules and regulations	-	-	-	-
<i>Prepare for the PG/ FIG/ SHG operations</i>	<b>6</b>	<b>10</b>	-	<b>6</b>
<b>PC3.</b> organise fundraising activities to support the functioning of the group	-	-	-	-
<b>PC4.</b> establish links with the local government at panchayat level to obtain access to the relevant development programmes and funds	-	-	-	-
<b>PC5.</b> induct subject matter experts (SMEs) in the group	-	-	-	-
<b>PC6.</b> assist in arranging the required Information and Communication Technology (ICT) products for the group	-	-	-	-
<b>PC7.</b> plan the commodity convergence with the relevant developmental programmes	-	-	-	-
<b>PC8.</b> plan optimal production to meet the market and household food security needs	-	-	-	-
<i>Conduct group meetings and training sessions</i>	<b>8</b>	<b>6</b>	-	<b>8</b>
<b>PC9.</b> conduct the initial group meetings to introduce the members, discuss the group objectives, group income-generating enterprises/ activities, methods of operation, etc.	-	-	-	-
<b>PC10.</b> assist in exchanging the domain and technical knowledge such as market or price information, latest technology, and resolving common issues or conflicts through the PG/ FIG/ SHG meetings	-	-	-	-
<b>PC11.</b> organise capacity building exercises such as skill development and training programmes	-	-	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Carry out collective farming/ activities</i>	<b>10</b>	<b>16</b>	-	<b>10</b>
<b>PC12.</b> organise field trials to identify and resolve problems encountered by group members in the field operations	-	-	-	-
<b>PC13.</b> procure/hire advanced and expensive farm machineries/tools and equipment using the group fund for collective use of the group members	-	-	-	-
<b>PC14.</b> establish and manage the group-owned bank of quality seeds/ fertilisers/ pesticides/ tools and equipment, etc.	-	-	-	-
<b>PC15.</b> use the group's credit facility as per the applicable terms and conditions	-	-	-	-
<b>PC16.</b> carry out relevant duties as per own role in the PG/FIG/ SHG such as the group leader/ secretary/ book-keeper, etc.	-	-	-	-
<b>PC17.</b> co-ordinate within the group(s) in procuring inputs in bulk/large-scale farming, packing/transportation/marketing of the produce, etc.	-	-	-	-
<b>PC18.</b> assist in forming forward and backward linkages through the PGs/ FIGs/ SHGs	-	-	-	-
<b>PC19.</b> identify and follow the relevant practices to add value to the produce such as processing, packing, upgrading the quality, etc.	-	-	-	-
<b>PC20.</b> arrange for the regular repair and maintenance of the farm machineries/tools, equipment/tube/bore wells/storage/drying platforms/processing units, etc.	-	-	-	-
<b>PC21.</b> connect and partner with other groups to expand the network and address common problems at a large scale	-	-	-	-
<b>NOS Total</b>	<b>30</b>	<b>40</b>	-	<b>30</b>

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	AGR/N9922
<b>NOS Name</b>	Engage in collective farming/activity
<b>Sector</b>	Agriculture
<b>Sub-Sector</b>	Generic
<b>Occupation</b>	Generic
<b>NSQF Level</b>	4
<b>Credits</b>	1
<b>Version</b>	2.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	24/02/2025
<b>NSQC Clearance Date</b>	24/02/2022

## Qualification Pack

### AGR/N9903: Maintain health and safety at the workplace

#### Description

This OS is about maintaining health and safety of self and other co-workers at the workplace

#### Scope

The scope covers the following :

- Maintain personal hygiene
- Maintain clean and safe workplace
- Administer appropriate emergency procedures

#### Elements and Performance Criteria

##### *Maintain personal hygiene*

To be competent, the user/individual on the job must be able to:

- PC1.** wash hands, legs and face with soap/alcohol based sanitizer at reasonable intervals
- PC2.** wash the worn clothes with soap and sun dry before use next time
- PC3.** ensure the face is covered with mask or three layers of cloth-piece
- PC4.** follow the workplace sanitization norms including distancing from sick people

##### *Maintain clean and safe workplace*

To be competent, the user/individual on the job must be able to:

- PC5.** carry out basic safety checks before operation of all tools, implements, and machinery and report identified hazards to the supervisor
- PC6.** wear appropriate Personal Protective Equipment (PPE) while performing work in accordance with the workplace policy
- PC7.** follow the instructions mentioned on the labels of chemicals/pesticides/fumigants etc to avoid hazards
- PC8.** assess risks prior to performing manual handling jobs, and work according to currently recommended safe practices
- PC9.** sanitize equipment, tools and machinery before and after use
- PC10.** use equipment and materials safely and correctly and return the same to designated storage after use
- PC11.** dispose waste safely and correctly in the designated area
- PC12.** recognize risks to bystanders and take required action to reduce the risks
- PC13.** work in a manner which minimizes environmental damage, ensuring all procedures and instructions for controlling risks are followed
- PC14.** report any accidents, incidents or problems without delay to an appropriate person and take necessary immediate action to reduce further danger
- PC15.** follow government / workplace advisories incase of outbreak of any disease/disaster

##### *Administer appropriate emergency procedures*

To be competent, the user/individual on the job must be able to:

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- PC16.** follow procedures for dealing with accidents, fires and emergencies, including communicating location and directions to the location of emergency, as per the workplace requirements
- PC17.** use emergency equipment in accordance with manufacturer's specifications and workplace requirements
- PC18.** provide treatment appropriate to the patient's injuries in accordance with recognized first aid techniques
- PC19.** recover (if practical), clean, inspect/test, refurbish, replace and store the first aid equipment as appropriate
- PC20.** report details of first aid administered in accordance with workplace procedures

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** relevant legislation, standards, policies, and procedures at work
- KU2.** relevant health and safety requirements applicable to the work environment
- KU3.** own job role and responsibilities and sources of information pertaining to work
- KU4.** who to approach for support in order to obtain work related information, clarifications and support
- KU5.** importance of following health, hygiene, safety and quality standards and the impact of not following the standards on consumers and the business
- KU6.** personal hygiene and fitness requirement
- KU7.** importance of sanitization of the workplace
- KU8.** types of Personal Protective Equipment (PPE) required at the workplace and their importance
- KU9.** the correct and safe way to use materials and equipment required for the work
- KU10.** the importance of good housekeeping at the workplace
- KU11.** safe waste disposal methods
- KU12.** methods for minimizing environmental damage during work
- KU13.** the risks to health and safety including contagious diseases and the measures to be taken to control those risks in the area of work
- KU14.** workplace procedures and requirements for the prevention and treatment of workplace injuries/illnesses.
- KU15.** basic emergency first aid procedure
- KU16.** local emergency services
- KU17.** why accidents, incidents and problems should be reported and the appropriate actions to be taken

## Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** record the data as per the requirement
- GS2.** report problems to the appropriate personnel in a timely manner

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- GS3.** read instruction manual for hand tool and equipments
- GS4.** communicate clearly and effectively with co-workers, and other stakeholders
- GS5.** comprehend information shared by senior people and experts
- GS6.** make decisions pertaining to personal hygiene and safety
- GS7.** schedule daily activities and draw up priorities
- GS8.** manage relationships with co-workers, manager and other stakeholders
- GS9.** assess situation and identify appropriate control measures

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Maintain personal hygiene</i>	<b>10</b>	<b>5</b>	-	<b>10</b>
<b>PC1.</b> wash hands, legs and face with soap/alcohol based sanitizer at reasonable intervals	-	-	-	-
<b>PC2.</b> wash the worn clothes with soap and sun dry before use next time	-	-	-	-
<b>PC3.</b> ensure the face is covered with mask or three layers of cloth-piece	-	-	-	-
<b>PC4.</b> follow the workplace sanitization norms including distancing from sick people	-	-	-	-
<i>Maintain clean and safe workplace</i>	<b>15</b>	<b>15</b>	-	<b>15</b>
<b>PC5.</b> carry out basic safety checks before operation of all tools, implements, and machinery and report identified hazards to the supervisor	-	-	-	-
<b>PC6.</b> wear appropriate Personal Protective Equipment (PPE) while performing work in accordance with the workplace policy	-	-	-	-
<b>PC7.</b> follow the instructions mentioned on the labels of chemicals/pesticides/fumigants etc to avoid hazards	-	-	-	-
<b>PC8.</b> assess risks prior to performing manual handling jobs, and work according to currently recommended safe practices	-	-	-	-
<b>PC9.</b> sanitize equipment, tools and machinery before and after use	-	-	-	-
<b>PC10.</b> use equipment and materials safely and correctly and return the same to designated storage after use	-	-	-	-
<b>PC11.</b> dispose waste safely and correctly in the designated area	-	-	-	-
<b>PC12.</b> recognize risks to bystanders and take required action to reduce the risks	-	-	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC13.</b> work in a manner which minimizes environmental damage, ensuring all procedures and instructions for controlling risks are followed	-	-	-	-
<b>PC14.</b> report any accidents, incidents or problems without delay to an appropriate person and take necessary immediate action to reduce further danger	-	-	-	-
<b>PC15.</b> follow government / workplace advisories incase of outbreak of any disease/disaster	-	-	-	-
<i>Administer appropriate emergency procedures</i>	<b>15</b>	<b>5</b>	-	<b>10</b>
<b>PC16.</b> follow procedures for dealing with accidents, fires and emergencies, including communicating location and directions to the location of emergency, as per the workplace requirements	-	-	-	-
<b>PC17.</b> use emergency equipment in accordance with manufacturer's specifications and workplace requirements	-	-	-	-
<b>PC18.</b> provide treatment appropriate to the patient's injuries in accordance with recognized first aid techniques	-	-	-	-
<b>PC19.</b> recover (if practical), clean, inspect/test, refurbish, replace and store the first aid equipment as appropriate	-	-	-	-
<b>PC20.</b> report details of first aid administered in accordance with workplace procedures	-	-	-	-
<b>NOS Total</b>	<b>40</b>	<b>25</b>	-	<b>35</b>

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	AGR/N9903
<b>NOS Name</b>	Maintain health and safety at the workplace
<b>Sector</b>	Agriculture
<b>Sub-Sector</b>	Generic
<b>Occupation</b>	Generic
<b>NSQF Level</b>	4
<b>Credits</b>	1
<b>Version</b>	4.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	29/03/2026
<b>NSQC Clearance Date</b>	29/03/2023

## Qualification Pack

### DGT/VSQ/N0102: Employability Skills (60 Hours)

#### Description

This unit is about employability skills, Constitutional values, becoming a professional in the 21st Century, digital, financial, and legal literacy, diversity and Inclusion, English and communication skills, customer service, entrepreneurship, and apprenticeship, getting ready for jobs and career development.

#### Scope

The scope covers the following :

- Introduction to Employability Skills
- Constitutional values - Citizenship
- Becoming a Professional in the 21st Century
- Basic English Skills
- Career Development & Goal Setting
- Communication Skills
- Diversity & Inclusion
- Financial and Legal Literacy
- Essential Digital Skills
- Entrepreneurship
- Customer Service
- Getting ready for Apprenticeship & Jobs

#### Elements and Performance Criteria

##### *Introduction to Employability Skills*

To be competent, the user/individual on the job must be able to:

- PC1.** identify employability skills required for jobs in various industries
- PC2.** identify and explore learning and employability portals

##### *Constitutional values - Citizenship*

To be competent, the user/individual on the job must be able to:

- PC3.** recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.
- PC4.** follow environmentally sustainable practices

##### *Becoming a Professional in the 21st Century*

To be competent, the user/individual on the job must be able to:

- PC5.** recognize the significance of 21st Century Skills for employment
- PC6.** practice the 21st Century Skills such as Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life

##### *Basic English Skills*

To be competent, the user/individual on the job must be able to:

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- PC7.** use basic English for everyday conversation in different contexts, in person and over the telephone
- PC8.** read and understand routine information, notes, instructions, mails, letters etc. written in English
- PC9.** write short messages, notes, letters, e-mails etc. in English

### *Career Development & Goal Setting*

To be competent, the user/individual on the job must be able to:

- PC10.** understand the difference between job and career
- PC11.** prepare a career development plan with short- and long-term goals, based on aptitude

### *Communication Skills*

To be competent, the user/individual on the job must be able to:

- PC12.** follow verbal and non-verbal communication etiquette and active listening techniques in various settings
- PC13.** work collaboratively with others in a team

### *Diversity & Inclusion*

To be competent, the user/individual on the job must be able to:

- PC14.** communicate and behave appropriately with all genders and PwD
- PC15.** escalate any issues related to sexual harassment at workplace according to POSH Act

### *Financial and Legal Literacy*

To be competent, the user/individual on the job must be able to:

- PC16.** select financial institutions, products and services as per requirement
- PC17.** carry out offline and online financial transactions, safely and securely
- PC18.** identify common components of salary and compute income, expenses, taxes, investments etc
- PC19.** identify relevant rights and laws and use legal aids to fight against legal exploitation

### *Essential Digital Skills*

To be competent, the user/individual on the job must be able to:

- PC20.** operate digital devices and carry out basic internet operations securely and safely
- PC21.** use e- mail and social media platforms and virtual collaboration tools to work effectively
- PC22.** use basic features of word processor, spreadsheets, and presentations

### *Entrepreneurship*

To be competent, the user/individual on the job must be able to:

- PC23.** identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research
- PC24.** develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion
- PC25.** identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity

### *Customer Service*

To be competent, the user/individual on the job must be able to:

- PC26.** identify different types of customers
- PC27.** identify and respond to customer requests and needs in a professional manner.

## Qualification Pack

**PC28.** follow appropriate hygiene and grooming standards

*Getting ready for apprenticeship & Jobs*

To be competent, the user/individual on the job must be able to:

**PC29.** create a professional Curriculum vitae (Résumé)

**PC30.** search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively

**PC31.** apply to identified job openings using offline /online methods as per requirement

**PC32.** answer questions politely, with clarity and confidence, during recruitment and selection

**PC33.** identify apprenticeship opportunities and register for it as per guidelines and requirements

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

**KU1.** need for employability skills and different learning and employability related portals

**KU2.** various constitutional and personal values

**KU3.** different environmentally sustainable practices and their importance

**KU4.** Twenty first (21st) century skills and their importance

**KU5.** how to use English language for effective verbal (face to face and telephonic) and written communication in formal and informal set up

**KU6.** importance of career development and setting long- and short-term goals

**KU7.** about effective communication

**KU8.** POSH Act

**KU9.** Gender sensitivity and inclusivity

**KU10.** different types of financial institutes, products, and services

**KU11.** how to compute income and expenditure

**KU12.** importance of maintaining safety and security in offline and online financial transactions

**KU13.** different legal rights and laws

**KU14.** different types of digital devices and the procedure to operate them safely and securely

**KU15.** how to create and operate an e- mail account and use applications such as word processors, spreadsheets etc.

**KU16.** how to identify business opportunities

**KU17.** types and needs of customers

**KU18.** how to apply for a job and prepare for an interview

**KU19.** apprenticeship scheme and the process of registering on apprenticeship portal

## Generic Skills (GS)

User/individual on the job needs to know how to:

**GS1.** read and write different types of documents/instructions/correspondence

**GS2.** communicate effectively using appropriate language in formal and informal settings

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- GS3.** behave politely and appropriately with all
- GS4.** how to work in a virtual mode
- GS5.** perform calculations efficiently
- GS6.** solve problems effectively
- GS7.** pay attention to details
- GS8.** manage time efficiently
- GS9.** maintain hygiene and sanitization to avoid infection

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Introduction to Employability Skills</i>	<b>1</b>	<b>1</b>	-	-
<b>PC1.</b> identify employability skills required for jobs in various industries	-	-	-	-
<b>PC2.</b> identify and explore learning and employability portals	-	-	-	-
<i>Constitutional values - Citizenship</i>	<b>1</b>	<b>1</b>	-	-
<b>PC3.</b> recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.	-	-	-	-
<b>PC4.</b> follow environmentally sustainable practices	-	-	-	-
<i>Becoming a Professional in the 21st Century</i>	<b>2</b>	<b>4</b>	-	-
<b>PC5.</b> recognize the significance of 21st Century Skills for employment	-	-	-	-
<b>PC6.</b> practice the 21st Century Skills such as Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life	-	-	-	-
<i>Basic English Skills</i>	<b>2</b>	<b>3</b>	-	-
<b>PC7.</b> use basic English for everyday conversation in different contexts, in person and over the telephone	-	-	-	-
<b>PC8.</b> read and understand routine information, notes, instructions, mails, letters etc. written in English	-	-	-	-
<b>PC9.</b> write short messages, notes, letters, e-mails etc. in English	-	-	-	-
<i>Career Development &amp; Goal Setting</i>	<b>1</b>	<b>2</b>	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC10.</b> understand the difference between job and career	-	-	-	-
<b>PC11.</b> prepare a career development plan with short- and long-term goals, based on aptitude	-	-	-	-
<i>Communication Skills</i>	<b>2</b>	<b>2</b>	-	-
<b>PC12.</b> follow verbal and non-verbal communication etiquette and active listening techniques in various settings	-	-	-	-
<b>PC13.</b> work collaboratively with others in a team	-	-	-	-
<i>Diversity &amp; Inclusion</i>	<b>1</b>	<b>2</b>	-	-
<b>PC14.</b> communicate and behave appropriately with all genders and PwD	-	-	-	-
<b>PC15.</b> escalate any issues related to sexual harassment at workplace according to POSH Act	-	-	-	-
<i>Financial and Legal Literacy</i>	<b>2</b>	<b>3</b>	-	-
<b>PC16.</b> select financial institutions, products and services as per requirement	-	-	-	-
<b>PC17.</b> carry out offline and online financial transactions, safely and securely	-	-	-	-
<b>PC18.</b> identify common components of salary and compute income, expenses, taxes, investments etc	-	-	-	-
<b>PC19.</b> identify relevant rights and laws and use legal aids to fight against legal exploitation	-	-	-	-
<i>Essential Digital Skills</i>	<b>3</b>	<b>4</b>	-	-
<b>PC20.</b> operate digital devices and carry out basic internet operations securely and safely	-	-	-	-
<b>PC21.</b> use e- mail and social media platforms and virtual collaboration tools to work effectively	-	-	-	-
<b>PC22.</b> use basic features of word processor, spreadsheets, and presentations	-	-	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Entrepreneurship</i>	<b>2</b>	<b>3</b>	-	-
<b>PC23.</b> identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research	-	-	-	-
<b>PC24.</b> develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion	-	-	-	-
<b>PC25.</b> identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity	-	-	-	-
<i>Customer Service</i>	<b>1</b>	<b>2</b>	-	-
<b>PC26.</b> identify different types of customers	-	-	-	-
<b>PC27.</b> identify and respond to customer requests and needs in a professional manner.	-	-	-	-
<b>PC28.</b> follow appropriate hygiene and grooming standards	-	-	-	-
<i>Getting ready for apprenticeship &amp; Jobs</i>	<b>2</b>	<b>3</b>	-	-
<b>PC29.</b> create a professional Curriculum vitae (Résumé)	-	-	-	-
<b>PC30.</b> search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively	-	-	-	-
<b>PC31.</b> apply to identified job openings using offline /online methods as per requirement	-	-	-	-
<b>PC32.</b> answer questions politely, with clarity and confidence, during recruitment and selection	-	-	-	-
<b>PC33.</b> identify apprenticeship opportunities and register for it as per guidelines and requirements	-	-	-	-
<b>NOS Total</b>	<b>20</b>	<b>30</b>	-	-

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	DGT/VSQ/N0102
<b>NOS Name</b>	Employability Skills (60 Hours)
<b>Sector</b>	Cross Sectoral
<b>Sub-Sector</b>	Professional Skills
<b>Occupation</b>	Employability
<b>NSQF Level</b>	4
<b>Credits</b>	2
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	28/02/2026
<b>NSQC Clearance Date</b>	28/02/2023

## Qualification Pack

### AGR/N0719: Carry out cultivation of rose flowers

#### Description

This OS unit is about carrying out the cultivation of rose flower crop and covers various activities such as site selection, soil preparation, propagation and transplantation of saplings, along with maintenance of flowers plants. It also covers the harvesting and post-harvest management of rose flowers.

#### Scope

The scope covers the following :

- Select the site and prepare the soil
- Select the rose variety and propagation method
- Harvest and transplant the saplings
- Maintain the rose plants
- Carry out harvesting and post-harvest management

#### Elements and Performance Criteria

##### *Select the site and prepare the soil*

To be competent, the user/individual on the job must be able to:

- PC1.** ensure the site selected for rose cultivation has the required temperature along with adequate exposure to sunlight
- PC2.** ensure the site does not experience heavy rainfall and waterlogging
- PC3.** ensure the soil is well-drained, loamy and rich in organic matters with the recommended alkalinity and pH levels
- PC4.** mix sand and farmyard manure in the soil in the quantity recommended for rose flower crop

##### *Select the rose variety and propagation method*

To be competent, the user/individual on the job must be able to:

- PC5.** select the appropriate variety of rose to be grown according to the region
- PC6.** select an appropriate method for propagating rose saplings, such as seeding, budding, cutting, and propagate saplings in the nursery

##### *Harvest and transplant the saplings*

To be competent, the user/individual on the job must be able to:

- PC7.** harvest the rose saplings from the nursery bed when they are ready for being transplanted
- PC8.** transplant rose saplings in the field at the recommended planting density, protecting them from damage
- PC9.** apply the recommended organic and inorganic fertilisers to the rose saplings appropriately and water them with the required quantity immediately after transplanting

##### *Maintain the rose plants*

To be competent, the user/individual on the job must be able to:

- PC10.** check the rose plants regularly for signs of pests and disease
- PC11.** apply the recommended pesticide or insecticide as per the prescription

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- PC12.** carry out pruning of rose plants using the appropriate implements
- PC13.** carry out weeding regularly to remove unwanted plants growing among rose plants
- PC14.** water the rose plants with the recommended quantity as per the irrigation schedule
- PC15.** • apply the recommended organic and inorganic fertilisers in the prescribed quantity at  
• appropriate intervals
- PC16.** carry out defoliation according to the rose variety to induce flowering

### *Carry out harvesting and post-harvest management*

To be competent, the user/individual on the job must be able to:

- PC17.** check the rose flowers to determine their readiness for being harvested
- PC18.** arrange the appropriate implements and accessories such as secateurs for harvesting the rose flowers
- PC19.** harvest rose flowers, ensuring no damage to the flowers and plants
- PC20.** collect the harvested rose flowers in appropriate baskets or crates
- PC21.** store the harvested rose flowers at the recommended temperature
- PC22.** sort and grade rose flowers on the basis of applicable parameters
- PC23.** prepare and apply the preservative solution on the rose flowers to preserve their freshness
- PC24.** bunch the rose flowers and pack them appropriately
- PC25.** maintain the manual and/ or electronic record of harvesting and processing of rose flowers using the physical registers and/ or the relevant computer application

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the criteria for selecting a site for rose crop cultivation
- KU2.** the recommended soil characteristics required for the cultivation of rose
- KU3.** the criteria for selecting an appropriate variety of rose to be grown according to the region
- KU4.** different methods of propagating rose saplings, such as seeding, budding, cutting, etc.
- KU5.** the process of harvesting and transplanting rose saplings in the field, and the recommended planting density to be maintained
- KU6.** different signs of pests and disease infestation in rose plants and their recommended treatment
- KU7.** the importance and process of pruning rose plants
- KU8.** the importance and process of carrying out weeding to remove unwanted plants growing among rose plants
- KU9.** the recommended quantity of water to irrigate the rose plants and the applicable irrigation schedule
- KU10.** the recommended organic and inorganic fertilisers to be used for rose crop
- KU11.** the importance and process of defoliation to induce flowering in rose plants
- KU12.** the indicators of the readiness of rose flowers for being harvested
- KU13.** the use of appropriate implements such as secateurs for harvesting the rose flowers
- KU14.** the importance of ensuring no damage to flowers during harvesting

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- KU15.** the recommended temperature and humidity for storing the harvested rose flowers
- KU16.** the applicable criteria for sorting and grading the harvested rose flowers
- KU17.** the process of preparing and applying the preservative solution on rose flowers to preserve their freshness
- KU18.** the process of bunching and packing rose flowers
- KU19.** how to maintain various records manually and electronically using the physical registers and the relevant computer application

## Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** write work-related notes
- GS2.** read the relevant guides and manuals
- GS3.** communicate politely and professionally
- GS4.** listen attentively to understand the information/ instructions being shared
- GS5.** plan and prioritise tasks to ensure timely completion
- GS6.** co-ordinate with the co-workers to achieve the work objectives
- GS7.** evaluate all possible solutions to a problem to select the best one
- GS8.** identify possible disruptions to work and take appropriate preventive measures
- GS9.** take quick decisions to deal with workplace emergencies or accidents

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Select the site and prepare the soil</i>	<b>6</b>	<b>8</b>	-	<b>6</b>
<b>PC1.</b> ensure the site selected for rose cultivation has the required temperature along with adequate exposure to sunlight	-	-	-	-
<b>PC2.</b> ensure the site does not experience heavy rainfall and waterlogging	-	-	-	-
<b>PC3.</b> ensure the soil is well-drained, loamy and rich in organic matters with the recommended alkalinity and pH levels	-	-	-	-
<b>PC4.</b> mix sand and farmyard manure in the soil in the quantity recommended for rose flower crop	-	-	-	-
<i>Select the rose variety and propagation method</i>	<b>6</b>	<b>4</b>	-	<b>6</b>
<b>PC5.</b> select the appropriate variety of rose to be grown according to the region	-	-	-	-
<b>PC6.</b> select an appropriate method for propagating rose saplings, such as seeding, budding, cutting, and propagate saplings in the nursery	-	-	-	-
<i>Harvest and transplant the saplings</i>	<b>4</b>	<b>6</b>	-	<b>4</b>
<b>PC7.</b> harvest the rose saplings from the nursery bed when they are ready for being transplanted	-	-	-	-
<b>PC8.</b> transplant rose saplings in the field at the recommended planting density, protecting them from damage	-	-	-	-
<b>PC9.</b> apply the recommended organic and inorganic fertilisers to the rose saplings appropriately and water them with the required quantity immediately after transplanting	-	-	-	-
<i>Maintain the rose plants</i>	<b>6</b>	<b>10</b>	-	<b>4</b>
<b>PC10.</b> check the rose plants regularly for signs of pests and disease	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC11.</b> apply the recommended pesticide or insecticide as per the prescription	-	-	-	-
<b>PC12.</b> carry out pruning of rose plants using the appropriate implements	-	-	-	-
<b>PC13.</b> carry out weeding regularly to remove unwanted plants growing among rose plants	-	-	-	-
<b>PC14.</b> water the rose plants with the recommended quantity as per the irrigation schedule	-	-	-	-
<b>PC15.</b> <ul style="list-style-type: none"> <li>• apply the recommended organic and inorganic fertilisers in the prescribed quantity at</li> <li>• appropriate intervals</li> </ul>	-	-	-	-
<b>PC16.</b> carry out defoliation according to the rose variety to induce flowering	-	-	-	-
<i>Carry out harvesting and post-harvest management</i>	<b>8</b>	<b>12</b>	-	<b>10</b>
<b>PC17.</b> check the rose flowers to determine their readiness for being harvested	-	-	-	-
<b>PC18.</b> arrange the appropriate implements and accessories such as secateurs for harvesting the rose flowers	-	-	-	-
<b>PC19.</b> harvest rose flowers, ensuring no damage to the flowers and plants	-	-	-	-
<b>PC20.</b> collect the harvested rose flowers in appropriate baskets or crates	-	-	-	-
<b>PC21.</b> store the harvested rose flowers at the recommended temperature	-	-	-	-
<b>PC22.</b> sort and grade rose flowers on the basis of applicable parameters	-	-	-	-
<b>PC23.</b> prepare and apply the preservative solution on the rose flowers to preserve their freshness	-	-	-	-
<b>PC24.</b> bunch the rose flowers and pack them appropriately	-	-	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC25.</b> maintain the manual and/ or electronic record of harvesting and processing of rose flowers using the physical registers and/ or the relevant computer application	-	-	-	-
<b>NOS Total</b>	<b>30</b>	<b>40</b>	-	<b>30</b>

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	AGR/N0719
<b>NOS Name</b>	Carry out cultivation of rose flowers
<b>Sector</b>	Agriculture
<b>Sub-Sector</b>	Agriculture Crop Production
<b>Occupation</b>	Floriculture Farming
<b>NSQF Level</b>	4
<b>Credits</b>	2
<b>Version</b>	2.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	17/11/2025
<b>NSQC Clearance Date</b>	17/11/2022

## Qualification Pack

### AGR/N0720: Carry out cultivation of gerbera flowers

#### Description

This OS unit is about carrying out the cultivation of gerbera flower crop and covers various activities such as site selection, soil preparation, propagation and transplantation of saplings, along with maintenance of flowers plants. It also covers the harvesting and post-harvest management of gerbera flowers.

#### Scope

The scope covers the following :

- Select the site and prepare the soil
- Select the gerbera variety and propagation method
- Propagate, harvest and transplant the saplings
- Maintain the gerbera plants
- Carry out harvesting and post-harvest management

#### Elements and Performance Criteria

##### *Select the site and prepare the soil*

To be competent, the user/individual on the job must be able to:

- PC1.** ensure the site selected for gerbera cultivation has the required temperature along with adequate shading and ventilation
- PC2.** ensure the soil is well-drained, rich in organic matters with the recommended alkalinity and pH levels
- PC3.** disinfect the soil with the recommended chemicals
- PC4.** apply plastic sheet cover on the soil and water it thoroughly after the recommended duration to wash away the disinfectants
- PC5.** mix sand and farmyard manure in the soil in the quantities recommended for the gerbera flower crop

##### *Select the gerbera variety and propagation method*

To be competent, the user/individual on the job must be able to:

- PC6.** select the appropriate variety of gerbera to be grown according to the region
- PC7.** select an appropriate method for propagating gerbera saplings such as seeding, or cutting of side shoots and suckers

##### *Propagate, harvest and transplant the saplings*

To be competent, the user/individual on the job must be able to:

- PC8.** propagate gerbera saplings in the required quantity in the nursery
- PC9.** protect the saplings from excessive heat and strong winds
- PC10.** harvest the gerbera saplings from the nursery bed when they are ready for being transplanted
- PC11.** transplant gerbera saplings in the field at the recommended planting density, protecting them from damage

## Qualification Pack

- PC12.** water the saplings with the recommended quantity and apply fertilisers in an appropriate quantity immediately after transplanting

### *Maintain the gerbera plants*

To be competent, the user/individual on the job must be able to:

- PC13.** install support for the gerbera plants and train them, as required
- PC14.** water the gerbera plants with the recommended quantity as per the irrigation schedule
- PC15.** carry out weeding regularly to remove unwanted plants growing among gerbera plants
- PC16.** check the gerbera plants regularly for signs of pests and disease
- PC17.** apply the recommended pesticide or insecticide as per the prescription
- PC18.** carry out pruning of gerbera plants using the appropriate implements
- PC19.** apply the recommended organic and inorganic fertilisers in the prescribed quantity at appropriate intervals
- PC20.** rake the soil in the field at the recommended intervals to facilitate easy absorption of water and fertilisers, and to provide air to the roots

### *Carry out harvesting and post-harvest management*

To be competent, the user/individual on the job must be able to:

- PC21.** check the gerbera flowers to ensure they bloom completely before being harvested
- PC22.** arrange the appropriate implements and accessories such as secateurs, crate or baskets for harvesting and collecting the gerbera flowers
- PC23.** harvest and collect gerbera flowers ensuring no damage to them and plants
- PC24.** maintain the harvested gerbera flowers in fresh chlorinated water and store them at the recommended temperature and humidity
- PC25.** sort and grade gerbera flowers on the basis of applicable parameters
- PC26.** soak the gerbera flower stalks in Sodium Hypochlorite solution for the recommended duration to improve their vase life
- PC27.** prepare and apply the preservative solution to the gerbera flowers to preserve their freshness
- PC28.** bunch the gerbera flowers and pack them using poly pouches and carton boxes in layers
- PC29.** maintain the manual and/ or electronic record of harvesting and processing of gerbera flowers using the physical registers and/ or the relevant computer application

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the criteria for selecting a site for gerbera crop cultivation such as temperature, shading, ventilation, etc.
- KU2.** the recommended soil characteristics required for the cultivation of gerbera
- KU3.** the criteria for selecting the appropriate variety of gerbera to be grown according to the region
- KU4.** the process of disinfecting the soil using the recommended chemicals
- KU5.** the importance of mixing sand and farmyard manure in the soil in the quantity recommended for gerbera flower crop

## Qualification Pack

- KU6.** different methods of propagating gerbera saplings such as seeding, or cutting of side shoots and suckers
- KU7.** the importance of protecting the gerbera saplings from excessive heat and strong winds
- KU8.** the process of harvesting and transplanting gerbera saplings in the field, and the recommended planting density to be maintained
- KU9.** the immediate care to be given to saplings after being transplanted
- KU10.** the process of installing support for gerbera plants and training them
- KU11.** the recommended irrigation schedule for gerbera plants
- KU12.** the importance and process of weeding out unwanted plants growing among gerbera plants
- KU13.** different signs of pests and disease infestation in gerbera plants and their recommended treatment
- KU14.** the importance of pruning gerbera plants at appropriate intervals
- KU15.** the recommended organic and inorganic fertilisers to be used for gerbera crop
- KU16.** 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
- KU17.** the indicators of the readiness of gerbera flowers for being harvested
- KU18.** the use of appropriate implements such as secateurs for harvesting the gerbera flowers
- KU19.** the importance of ensuring no damage to flowers during harvesting
- KU20.** the importance of maintaining the harvested gerbera flowers in fresh chlorinated water and storing them at the recommended temperature and humidity
- KU21.** the applicable criteria for sorting and grading the harvested gerbera flowers
- KU22.** the process of preparing and applying the preservative solution on gerbera flowers to preserve their freshness
- KU23.** the practice of soaking gerbera flower stalks in Sodium Hypochlorite solution for the recommended duration to improve their vase life
- KU24.** the process of bunching and packing gerbera flowers in appropriate packing material such as poly pouches and carton boxes
- KU25.** how to maintain various records manually and electronically using the physical registers and the relevant computer application

## Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** maintain work-related records
- GS2.** read and follow the health and safety instructions
- GS3.** listen attentively to understand the information/ instructions being shared by the speaker
- GS4.** communicate clearly and politely
- GS5.** plan and prioritise tasks to ensure timely completion
- GS6.** identify possible disruptions to work and take appropriate preventive measures
- GS7.** take quick decisions to deal with workplace emergencies/ accidents
- GS8.** evaluate all possible solutions to a problem to select the best one
- GS9.** co-ordinate with the co-workers to achieve work objectives

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Select the site and prepare the soil</i>	<b>8</b>	<b>10</b>	-	<b>6</b>
<b>PC1.</b> ensure the site selected for gerbera cultivation has the required temperature along with adequate shading and ventilation	-	-	-	-
<b>PC2.</b> ensure the soil is well-drained, rich in organic matters with the recommended alkalinity and pH levels	-	-	-	-
<b>PC3.</b> disinfect the soil with the recommended chemicals	-	-	-	-
<b>PC4.</b> apply plastic sheet cover on the soil and water it thoroughly after the recommended duration to wash away the disinfectants	-	-	-	-
<b>PC5.</b> mix sand and farmyard manure in the soil in the quantities recommended for the gerbera flower crop	-	-	-	-
<i>Select the gerbera variety and propagation method</i>	<b>2</b>	<b>4</b>	-	<b>2</b>
<b>PC6.</b> select the appropriate variety of gerbera to be grown according to the region	-	-	-	-
<b>PC7.</b> select an appropriate method for propagating gerbera saplings such as seeding, or cutting of side shoots and suckers	-	-	-	-
<i>Propagate, harvest and transplant the saplings</i>	<b>6</b>	<b>8</b>	-	<b>8</b>
<b>PC8.</b> propagate gerbera saplings in the required quantity in the nursery	-	-	-	-
<b>PC9.</b> protect the saplings from excessive heat and strong winds	-	-	-	-
<b>PC10.</b> harvest the gerbera saplings from the nursery bed when they are ready for being transplanted	-	-	-	-
<b>PC11.</b> transplant gerbera saplings in the field at the recommended planting density, protecting them from damage	-	-	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC12.</b> water the saplings with the recommended quantity and apply fertilisers in an appropriate quantity immediately after transplanting	-	-	-	-
<i>Maintain the gerbera plants</i>	<b>4</b>	<b>6</b>	-	<b>6</b>
<b>PC13.</b> install support for the gerbera plants and train them, as required	-	-	-	-
<b>PC14.</b> water the gerbera plants with the recommended quantity as per the irrigation schedule	-	-	-	-
<b>PC15.</b> carry out weeding regularly to remove unwanted plants growing among gerbera plants	-	-	-	-
<b>PC16.</b> check the gerbera plants regularly for signs of pests and disease	-	-	-	-
<b>PC17.</b> apply the recommended pesticide or insecticide as per the prescription	-	-	-	-
<b>PC18.</b> carry out pruning of gerbera plants using the appropriate implements	-	-	-	-
<b>PC19.</b> apply the recommended organic and inorganic fertilisers in the prescribed quantity at appropriate intervals	-	-	-	-
<b>PC20.</b> rake the soil in the field at the recommended intervals to facilitate easy absorption of water and fertilisers, and to provide air to the roots	-	-	-	-
<i>Carry out harvesting and post-harvest management</i>	<b>10</b>	<b>12</b>	-	<b>8</b>
<b>PC21.</b> check the gerbera flowers to ensure they bloom completely before being harvested	-	-	-	-
<b>PC22.</b> arrange the appropriate implements and accessories such as secateurs, crate or baskets for harvesting and collecting the gerbera flowers	-	-	-	-
<b>PC23.</b> harvest and collect gerbera flowers ensuring no damage to them and plants	-	-	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC24.</b> maintain the harvested gerbera flowers in fresh chlorinated water and store them at the recommended temperature and humidity	-	-	-	-
<b>PC25.</b> sort and grade gerbera flowers on the basis of applicable parameters	-	-	-	-
<b>PC26.</b> soak the gerbera flower stalks in Sodium Hypochlorite solution for the recommended duration to improve their vase life	-	-	-	-
<b>PC27.</b> prepare and apply the preservative solution to the gerbera flowers to preserve their freshness	-	-	-	-
<b>PC28.</b> bunch the gerbera flowers and pack them using poly pouches and carton boxes in layers	-	-	-	-
<b>PC29.</b> maintain the manual and/ or electronic record of harvesting and processing of gerbera flowers using the physical registers and/ or the relevant computer application	-	-	-	-
<b>NOS Total</b>	<b>30</b>	<b>40</b>	<b>-</b>	<b>30</b>

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	AGR/N0720
<b>NOS Name</b>	Carry out cultivation of gerbera flowers
<b>Sector</b>	Agriculture
<b>Sub-Sector</b>	Agriculture Crop Production
<b>Occupation</b>	Floriculture Farming
<b>NSQF Level</b>	4
<b>Credits</b>	2
<b>Version</b>	2.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	17/11/2025
<b>NSQC Clearance Date</b>	17/11/2022

## Qualification Pack

### AGR/N0721: Carry out cultivation of chrysanthemum flowers

#### Description

This OS unit is about carrying out the cultivation of chrysanthemum flower crop and covers various activities such as site selection, field preparation, propagation and transplantation of saplings, along with maintenance of flowers plants. It also covers the harvesting and post-harvest management of chrysanthemum flowers.

#### Scope

The scope covers the following :

- Select the site and prepare the field
- Select the chrysanthemum variety and propagation method
- Propagate, harvest and transplant the saplings
- Maintain the chrysanthemum plants
- Carry out harvesting and post-harvest management

#### Elements and Performance Criteria

##### *Select the site and prepare the field*

To be competent, the user/individual on the job must be able to:

- PC1.** select a site for chrysanthemum cultivation with the required temperature, relative humidity along with adequate exposure to sunlight for the optimum growth of plants
- PC2.** ensure the site does not experience heavy rainfall and waterlogging
- PC3.** ensure the soil is well-drained, loamy and rich in organic matters with the recommended alkalinity and pH levels
- PC4.** carry out ploughing and harrowing in the field using the relevant farm machineries and apply farmyard manure in the recommended quantity
- PC5.** apply the recommended chemicals to the soil as per the prescription to disinfect the soil
- PC6.** apply plastic sheet cover on the soil and water it thoroughly after the recommended duration to wash away the disinfectants
- PC7.** install the appropriate irrigation or fertigation system in the field
- PC8.** create drains in the field for effective drainage of water

##### *Select the chrysanthemum variety and propagation method*

To be competent, the user/individual on the job must be able to:

- PC9.** select the appropriate variety of chrysanthemum to be grown according to the region and climate
- PC10.** select an appropriate method for propagating chrysanthemum saplings, such as terminal cutting or suckers

##### *Propagate, harvest and transplant the saplings*

To be competent, the user/individual on the job must be able to:

- PC11.** propagate chrysanthemum saplings in the required quantity in the nursery
- PC12.** protect the saplings from strong winds, and excessive heat and cold

## Qualification Pack

- PC13.** harvest the chrysanthemum saplings from the nursery bed when they are ready for being transplanted
- PC14.** transplant chrysanthemum saplings in the field at the recommended planting density, protecting them from damage
- PC15.** water the saplings with the recommended quantity and apply fertilisers in an appropriate quantity immediately after transplanting

### *Maintain the chrysanthemum plants*

To be competent, the user/individual on the job must be able to:

- PC16.** apply the recommended organic and inorganic fertilisers in the prescribed quantity at appropriate intervals
- PC17.** use the recommended growth regulators as per the requirement
- PC18.** check the chrysanthemum plants regularly for signs of pests and disease
- PC19.** apply the recommended pesticide or insecticide as per the prescription
- PC20.** water the chrysanthemum plants with the recommended quantity as per the irrigation schedule and prevailing weather conditions
- PC21.** drain out any water accumulated in the field
- PC22.** carry out pinching to induce the growth of lateral branches and install appropriate support to train the plants
- PC23.** carry out disbudding, removing buds from the stems of plants and leaving only terminal buds to ensure the growth of large blooms
- PC24.** carry out pruning of chrysanthemum plants using the appropriate implements at regular intervals, removing the side suckers
- PC25.** carry out weeding at the recommended intervals to remove unwanted plants growing among the chrysanthemum plants

### *Carry out harvesting and post-harvest management*

To be competent, the user/individual on the job must be able to:

- PC26.** check the chrysanthemum flowers to ensure their maturity for being harvested
- PC27.** arrange the appropriate implements and accessories such as secateurs, crate or baskets for harvesting and collecting the chrysanthemum flowers
- PC28.** harvest and collect chrysanthemum flowers ensuring no damage to them and plants
- PC29.** store the harvested chrysanthemum flowers at the recommended temperature and humidity
- PC30.** sort and grade chrysanthemum flowers on the basis of applicable parameters
- PC31.** prepare and apply the preservative solution on the chrysanthemum flowers to preserve their freshness
- PC32.** bunch the chrysanthemum flowers and pack them using appropriate packing material such as bamboo baskets or gunny bags
- PC33.** maintain the manual and/ or electronic record of harvesting and processing of chrysanthemum flowers using the physical registers and/ or the relevant computer application

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

## Qualification Pack

- KU1.** the criteria for selecting a site for chrysanthemum crop cultivation such as temperature, relative humidity, adequate exposure to sunlight, etc.
- KU2.** the recommended soil characteristics required for the cultivation of chrysanthemum
- KU3.** the criteria for selecting the appropriate variety of chrysanthemum to be grown according to the region
- KU4.** the process of disinfecting the soil using the recommended chemicals
- KU5.** the importance of mixing sand and farmyard manure in the soil in the quantity recommended for chrysanthemum flower crop
- KU6.** different methods of propagating chrysanthemum saplings such as terminal cutting or suckers
- KU7.** the importance of protecting the chrysanthemum saplings from excessive heat and strong winds
- KU8.** the process of harvesting and transplanting chrysanthemum saplings in the field, and the recommended planting density to be maintained
- KU9.** the immediate care to be given to saplings after being transplanted
- KU10.** the process of installing support for chrysanthemum plants and training them
- KU11.** the recommended irrigation schedule for chrysanthemum plants
- KU12.** the practice of pinching to induce the growth of lateral branches and installing appropriate support to train the plants
- KU13.** the practice of disbudding to achieve large blooms
- KU14.** the importance and process of weeding out unwanted plants growing among chrysanthemum plants
- KU15.** different signs of pests and disease infestation in chrysanthemum plants and their recommended treatment
- KU16.** the importance of pruning chrysanthemum plants at appropriate intervals
- KU17.** the recommended organic and inorganic fertilisers to be used for chrysanthemum crop
- KU18.** 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
- KU19.** the indicators of the readiness of chrysanthemum flowers for being harvested
- KU20.** the use of appropriate implements such as secateurs for harvesting the chrysanthemum flowers
- KU21.** the importance of ensuring no damage to flowers during harvesting
- KU22.** the importance of maintaining the harvested chrysanthemum flowers in fresh chlorinated water and storing them at the recommended temperature and humidity
- KU23.** the applicable criteria for sorting and grading the harvested chrysanthemum flowers
- KU24.** the process of preparing and applying the preservative solution on chrysanthemum flowers to preserve their freshness
- KU25.** the process of bunching and packing chrysanthemum flowers in appropriate packing material such as bamboo baskets or gunny bags
- KU26.** how to maintain various records manually and electronically using the physical registers and the relevant computer application

## Generic Skills (GS)

## Qualification Pack

User/individual on the job needs to know how to:

- GS1.** maintain work-related records
- GS2.** read the health and safety instructions
- GS3.** listen attentively to understand the information/ instructions being shared
- GS4.** communicate clearly and politely
- GS5.** plan and prioritise tasks to ensure timely completion
- GS6.** identify possible disruptions to work and take appropriate preventive measures
- GS7.** take quick decisions to deal with workplace emergencies/ accidents
- GS8.** evaluate all possible solutions to a problem to select the best one
- GS9.** co-ordinate with the co-workers to achieve the work objectives

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Select the site and prepare the field</i>	<b>8</b>	<b>10</b>	-	<b>8</b>
<b>PC1.</b> select a site for chrysanthemum cultivation with the required temperature, relative humidity along with adequate exposure to sunlight for the optimum growth of plants	-	-	-	-
<b>PC2.</b> ensure the site does not experience heavy rainfall and waterlogging	-	-	-	-
<b>PC3.</b> ensure the soil is well-drained, loamy and rich in organic matters with the recommended alkalinity and pH levels	-	-	-	-
<b>PC4.</b> carry out ploughing and harrowing in the field using the relevant farm machineries and apply farmyard manure in the recommended quantity	-	-	-	-
<b>PC5.</b> apply the recommended chemicals to the soil as per the prescription to disinfect the soil	-	-	-	-
<b>PC6.</b> apply plastic sheet cover on the soil and water it thoroughly after the recommended duration to wash away the disinfectants	-	-	-	-
<b>PC7.</b> install the appropriate irrigation or fertigation system in the field	-	-	-	-
<b>PC8.</b> create drains in the field for effective drainage of water	-	-	-	-
<i>Select the chrysanthemum variety and propagation method</i>	<b>2</b>	<b>4</b>	-	<b>2</b>
<b>PC9.</b> select the appropriate variety of chrysanthemum to be grown according to the region and climate	-	-	-	-
<b>PC10.</b> select an appropriate method for propagating chrysanthemum saplings, such as terminal cutting or suckers	-	-	-	-
<i>Propagate, harvest and transplant the saplings</i>	<b>4</b>	<b>6</b>	-	<b>4</b>
<b>PC11.</b> propagate chrysanthemum saplings in the required quantity in the nursery	-	-	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC12.</b> protect the saplings from strong winds, and excessive heat and cold	-	-	-	-
<b>PC13.</b> harvest the chrysanthemum saplings from the nursery bed when they are ready for being transplanted	-	-	-	-
<b>PC14.</b> transplant chrysanthemum saplings in the field at the recommended planting density, protecting them from damage	-	-	-	-
<b>PC15.</b> water the saplings with the recommended quantity and apply fertilisers in an appropriate quantity immediately after transplanting	-	-	-	-
<i>Maintain the chrysanthemum plants</i>	<b>8</b>	<b>8</b>	-	<b>4</b>
<b>PC16.</b> apply the recommended organic and inorganic fertilisers in the prescribed quantity at appropriate intervals	-	-	-	-
<b>PC17.</b> use the recommended growth regulators as per the requirement	-	-	-	-
<b>PC18.</b> check the chrysanthemum plants regularly for signs of pests and disease	-	-	-	-
<b>PC19.</b> apply the recommended pesticide or insecticide as per the prescription	-	-	-	-
<b>PC20.</b> water the chrysanthemum plants with the recommended quantity as per the irrigation schedule and prevailing weather conditions	-	-	-	-
<b>PC21.</b> drain out any water accumulated in the field	-	-	-	-
<b>PC22.</b> carry out pinching to induce the growth of lateral branches and install appropriate support to train the plants	-	-	-	-
<b>PC23.</b> carry out disbudding, removing buds from the stems of plants and leaving only terminal buds to ensure the growth of large blooms	-	-	-	-
<b>PC24.</b> carry out pruning of chrysanthemum plants using the appropriate implements at regular intervals, removing the side suckers	-	-	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC25.</b> carry out weeding at the recommended intervals to remove unwanted plants growing among the chrysanthemum plants	-	-	-	-
<i>Carry out harvesting and post-harvest management</i>	<b>8</b>	<b>12</b>	-	<b>12</b>
<b>PC26.</b> check the chrysanthemum flowers to ensure their maturity for being harvested	-	-	-	-
<b>PC27.</b> arrange the appropriate implements and accessories such as secateurs, crate or baskets for harvesting and collecting the chrysanthemum flowers	-	-	-	-
<b>PC28.</b> harvest and collect chrysanthemum flowers ensuring no damage to them and plants	-	-	-	-
<b>PC29.</b> store the harvested chrysanthemum flowers at the recommended temperature and humidity	-	-	-	-
<b>PC30.</b> sort and grade chrysanthemum flowers on the basis of applicable parameters	-	-	-	-
<b>PC31.</b> prepare and apply the preservative solution on the chrysanthemum flowers to preserve their freshness	-	-	-	-
<b>PC32.</b> bunch the chrysanthemum flowers and pack them using appropriate packing material such as bamboo baskets or gunny bags	-	-	-	-
<b>PC33.</b> maintain the manual and/ or electronic record of harvesting and processing of chrysanthemum flowers using the physical registers and/ or the relevant computer application	-	-	-	-
<b>NOS Total</b>	<b>30</b>	<b>40</b>	-	<b>30</b>

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	AGR/N0721
<b>NOS Name</b>	Carry out cultivation of chrysanthemum flowers
<b>Sector</b>	Agriculture
<b>Sub-Sector</b>	Agriculture Crop Production
<b>Occupation</b>	Floriculture Farming
<b>NSQF Level</b>	4
<b>Credits</b>	2
<b>Version</b>	2.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	17/11/2025
<b>NSQC Clearance Date</b>	17/11/2022

## Qualification Pack

### AGR/N0722: Carry out cultivation of orchid flowers

#### Description

This OS unit is about carrying out the cultivation of orchid flower crop and covers various activities such as site selection, field preparation, propagation and transplantation of saplings, along with the maintenance of flowers plants. It also covers the harvesting and post-harvest management of orchid flowers.

#### Scope

The scope covers the following :

- Select the site and prepare for orchid flower cultivation
- Propagate orchid plants
- Maintain the orchid plants
- Carry out harvesting and post-harvest management

#### Elements and Performance Criteria

##### *Select the site and prepare for orchid flower cultivation*

To be competent, the user/individual on the job must be able to:

- PC1.** select a site for orchid cultivation with moderate temperature and humidity along with good ventilation
- PC2.** ensure the site does not experience extended periods of sunlight exposure and strong winds
- PC3.** arrange the required materials for growing orchids such as coconut husk, charcoal, broken pieces of bricks and tiles to prepare the growing media; seeds, perforated earthen pots; foliar spray solution; growth regulators, etc.
- PC4.** select the appropriate variety of orchid to be grown according to the region and climate
- PC5.** prepare a green shade net house or polyhouse to provide sunlight to orchid flower plants through shades

##### *Propagate orchid plants*

To be competent, the user/individual on the job must be able to:

- PC6.** prepare the growth media using the recommended materials and fill in the pots with its recommended quantity
- PC7.** ensure the pots have drainage holes for draining out excess water
- PC8.** plant the orchid seeds in pots at the recommended depth and density, and water them with the recommended quantity
- PC9.** maintain the pots at the recommended temperature and humidity to induce the germination of seeds

##### *Maintain the orchid plants*

To be competent, the user/individual on the job must be able to:

- PC10.** install support in the pots such as bamboo sticks to help the orchid plants grow vertically
- PC11.** protect the orchid plants from strong winds, and direct sunlight
- PC12.** apply the recommended organic and inorganic fertilisers to orchid plants in the prescribed quantity at appropriate intervals

## Qualification Pack

- PC13.** use the recommended growth regulators as per the requirement
- PC14.** check the orchid plants regularly for signs of pests and disease
- PC15.** spray the recommended pesticide or insecticide on orchid plants as per the prescription
- PC16.** water the orchid plants with the recommended quantity as per the irrigation schedule and prevailing weather conditions
- PC17.** ensure no accumulation of water in the pots to prevent root rot
- PC18.** remove the dead leaves from orchid plants and weeds from the pots
- PC19.** maintain the orchid plants in moderate temperature, recommended humidity and good air circulation for their survival and optimum growth

### *Carry out harvesting and post-harvest management*

To be competent, the user/individual on the job must be able to:

- PC20.** check the orchid flowers to ensure their maturity for being harvested
- PC21.** arrange the appropriate implements and accessories such as secateurs, crate or baskets for harvesting and collecting the orchid flowers
- PC22.** harvest the orchid flowers with or without stalk as per the requirement and collect them in baskets or crates, ensuring no damage to the flowers
- PC23.** sort and grade the harvested orchid flowers on the basis of applicable parameters
- PC24.** prepare and apply the preservative solution on the orchid flowers to preserve their freshness
- PC25.** store the harvested orchid flowers at the recommended temperature and humidity
- PC26.** bunch the orchid flowers and pack them using appropriate packing material such as bamboo baskets or gunny bags
- PC27.** maintain the record of harvesting and processing of orchid flowers

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** 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.
- KU2.** various inputs required for orchid flower cultivation such as coconut husk, charcoal, broken pieces of bricks and tiles to prepare the growing media, seeds, perforated earthen pots, foliar spray solution, growth regulators, etc.
- KU3.** the criteria for selecting the appropriate variety of orchid to be grown according to the region
- KU4.** the process of preparing a green shade net house or polyhouse for orchid flower cultivation
- KU5.** the process of preparing the growth media for the cultivation of orchid flowers
- KU6.** the importance of ensuring drainage holes in the pots for the drainage of excess water
- KU7.** the recommended depth and density for planting orchid seeds in pots
- KU8.** appropriate temperature and humidity to be maintained to induce the germination of orchid seeds
- KU9.** the process of installing support in the pots to help the orchid plants grow vertically
- KU10.** the importance of protecting the orchid plants from strong winds and direct sunlight

## Qualification Pack

- KU11.** their prescribed quantity of recommended organic and inorganic fertilisers to be used with orchid plants
- KU12.** use of recommended growth regulators
- KU13.** various signs of pests and disease in orchid plants
- KU14.** the process of spraying the recommended pesticide or insecticide on orchid plants as per the prescription
- KU15.** water requirements of orchid plants and the recommended irrigation schedule
- KU16.** importance of ensuring no accumulation of water in the orchid plant pots to prevent root rot
- KU17.** the importance of removing the dead leaves from orchid plants and weeds from the pots
- KU18.** the importance of maintaining orchid plants in moderate temperature, recommended humidity and good air circulation
- KU19.** the indicators of the readiness of orchid flowers for being harvested
- KU20.** the use of appropriate implements such as secateurs to harvest orchid flowers with or without stalk, ensuring no damage to flowers and stalk
- KU21.** the applicable criteria for sorting and grading the harvested orchid flowers
- KU22.** the process of preparing and applying the preservative solution on orchid flowers to preserve their freshness
- KU23.** the practice of soaking orchid flower stalks in Sodium Hypochlorite solution for the recommended duration to improve their vase life
- KU24.** the process of bunching and packing orchid flowers in appropriate packing material such as bamboo baskets and gunny bags

## Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** write work-related notes and maintain relevant records
- GS2.** read the relevant literature to get the latest updates about the field of work
- GS3.** listen attentively to understand the information/ instructions being shared by the speaker
- GS4.** communicate politely and professionally
- GS5.** plan and prioritise tasks to ensure timely completion
- GS6.** evaluate all possible solutions to a problem to select the best one
- GS7.** co-ordinate with the co-workers to achieve the work objectives
- GS8.** identify possible disruptions to work and take appropriate preventive measures
- GS9.** take quick decisions to deal with workplace emergencies or accidents

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Select the site and prepare for orchid flower cultivation</i>	<b>6</b>	<b>8</b>	-	<b>8</b>
<b>PC1.</b> select a site for orchid cultivation with moderate temperature and humidity along with good ventilation	-	-	-	-
<b>PC2.</b> ensure the site does not experience extended periods of sunlight exposure and strong winds	-	-	-	-
<b>PC3.</b> arrange the required materials for growing orchids such as coconut husk, charcoal, broken pieces of bricks and tiles to prepare the growing media; seeds, perforated earthen pots; foliar spray solution; growth regulators, etc.	-	-	-	-
<b>PC4.</b> select the appropriate variety of orchid to be grown according to the region and climate	-	-	-	-
<b>PC5.</b> prepare a green shade net house or polyhouse to provide sunlight to orchid flower plants through shades	-	-	-	-
<i>Propagate orchid plants</i>	<b>4</b>	<b>6</b>	-	<b>4</b>
<b>PC6.</b> prepare the growth media using the recommended materials and fill in the pots with its recommended quantity	-	-	-	-
<b>PC7.</b> ensure the pots have drainage holes for draining out excess water	-	-	-	-
<b>PC8.</b> plant the orchid seeds in pots at the recommended depth and density, and water them with the recommended quantity	-	-	-	-
<b>PC9.</b> maintain the pots at the recommended temperature and humidity to induce the germination of seeds	-	-	-	-
<i>Maintain the orchid plants</i>	<b>10</b>	<b>12</b>	-	<b>8</b>
<b>PC10.</b> install support in the pots such as bamboo sticks to help the orchid plants grow vertically	-	-	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC11.</b> protect the orchid plants from strong winds, and direct sunlight	-	-	-	-
<b>PC12.</b> apply the recommended organic and inorganic fertilisers to orchid plants in the prescribed quantity at appropriate intervals	-	-	-	-
<b>PC13.</b> use the recommended growth regulators as per the requirement	-	-	-	-
<b>PC14.</b> check the orchid plants regularly for signs of pests and disease	-	-	-	-
<b>PC15.</b> spray the recommended pesticide or insecticide on orchid plants as per the prescription	-	-	-	-
<b>PC16.</b> water the orchid plants with the recommended quantity as per the irrigation schedule and prevailing weather conditions	-	-	-	-
<b>PC17.</b> ensure no accumulation of water in the pots to prevent root rot	-	-	-	-
<b>PC18.</b> remove the dead leaves from orchid plants and weeds from the pots	-	-	-	-
<b>PC19.</b> maintain the orchid plants in moderate temperature, recommended humidity and good air circulation for their survival and optimum growth	-	-	-	-
<i>Carry out harvesting and post-harvest management</i>	<b>10</b>	<b>14</b>	-	<b>10</b>
<b>PC20.</b> check the orchid flowers to ensure their maturity for being harvested	-	-	-	-
<b>PC21.</b> arrange the appropriate implements and accessories such as secateurs, crate or baskets for harvesting and collecting the orchid flowers	-	-	-	-
<b>PC22.</b> harvest the orchid flowers with or without stalk as per the requirement and collect them in baskets or crates, ensuring no damage to the flowers	-	-	-	-
<b>PC23.</b> sort and grade the harvested orchid flowers on the basis of applicable parameters	-	-	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC24.</b> prepare and apply the preservative solution on the orchid flowers to preserve their freshness	-	-	-	-
<b>PC25.</b> store the harvested orchid flowers at the recommended temperature and humidity	-	-	-	-
<b>PC26.</b> bunch the orchid flowers and pack them using appropriate packing material such as bamboo baskets or gunny bags	-	-	-	-
<b>PC27.</b> maintain the record of harvesting and processing of orchid flowers	-	-	-	-
<b>NOS Total</b>	<b>30</b>	<b>40</b>	-	<b>30</b>

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	AGR/N0722
<b>NOS Name</b>	Carry out cultivation of orchid flowers
<b>Sector</b>	Agriculture
<b>Sub-Sector</b>	Agriculture Crop Production
<b>Occupation</b>	Floriculture Farming
<b>NSQF Level</b>	4
<b>Credits</b>	2
<b>Version</b>	2.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	17/11/2025
<b>NSQC Clearance Date</b>	17/11/2022

## Qualification Pack

### AGR/N0723: Carry out cultivation of marigold flowers

#### Description

This OS unit is about carrying out the cultivation of marigold flower crop and covers various activities such as site selection, field preparation, propagation and transplantation of saplings, along with the maintenance of flowers plants. It also covers the harvesting and post-harvest management of marigold flowers.

#### Scope

The scope covers the following :

- Select the site and prepare the field
- Select the marigold variety and propagation method
- Propagate, harvest and transplant the saplings
- Maintain the marigold plants
- Carry out harvesting and post-harvest management

#### Elements and Performance Criteria

##### *Select the site and prepare the field*

To be competent, the user/individual on the job must be able to:

- PC1.** select a site for marigold cultivation with the required temperature and exposure to the sunlight for the optimum growth of plants
- PC2.** ensure the site does not experience waterlogging
- PC3.** ensure the soil is well-drained and loamy with the recommended alkalinity, salinity, acidity and pH levels
- PC4.** carry out ploughing and harrowing in the field, and create ridges and furrows of recommended dimensions
- PC5.** apply farmyard manure in the field in the recommended quantity
- PC6.** disinfect the soil using the recommended chemicals as per the prescription
- PC7.** install the appropriate irrigation or fertigation system in the field
- PC8.** create drains in the field for effective drainage of water

##### *Select the marigold variety and propagation method*

To be competent, the user/individual on the job must be able to:

- PC9.** select the appropriate variety of marigold to be grown according to the region and climate
- PC10.** select an appropriate propagation method for growing marigold saplings such as terminal seeding or cuttings

##### *Propagate, harvest and transplant the saplings*

To be competent, the user/individual on the job must be able to:

- PC11.** treat the marigold seeds with the recommended pesticide or insecticide before sowing
- PC12.** propagate marigold saplings in the required quantity in the nursery, protecting them from strong winds, and excessive heat and cold

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- PC13.** maintain the recommended level of moisture in the nursery bed for the optimum growth of saplings
- PC14.** harvest the marigold saplings from the nursery bed they when are ready for being transplanted
- PC15.** transplant marigold saplings in the field at the recommended depth and planting density, protecting them from damage
- PC16.** press soil around the root zone to avoid the formation of air pockets
- PC17.** water the saplings with the recommended quantity and apply fertilisers in an appropriate quantity immediately after transplanting

### *Maintain the marigold plants*

To be competent, the user/individual on the job must be able to:

- PC18.** apply the recommended organic and inorganic fertilisers in the prescribed quantity at appropriate intervals
- PC19.** check the marigold plants regularly for signs of pests and disease
- PC20.** apply the recommended pesticide or insecticide as per the prescription
- PC21.** water the marigold plants with the recommended quantity as per the irrigation schedule and prevailing weather conditions
- PC22.** drain out any water accumulated in the field
- PC23.** carry out pinching to induce the growth of lateral branches
- PC24.** remove dead leaves and branches from marigold plants
- PC25.** carry out weeding at the recommended intervals to remove unwanted plants growing among the marigold plants

### *Carry out harvesting and post-harvest management*

To be competent, the user/individual on the job must be able to:

- PC26.** check the marigold flowers to ensure their maturity for being harvested
- PC27.** arrange the appropriate implements and accessories such as secateurs, crate or baskets for harvesting and collecting the marigold flowers
- PC28.** irrigate the marigold plants before harvesting
- PC29.** harvest the marigold flowers with or without stalk as per the market requirements, ensuring no damage to flowers and plants
- PC30.** collect the harvested flowers in appropriate baskets or containers and store them at the recommended temperature and humidity
- PC31.** sort and grade marigold flowers on the basis of applicable parameters
- PC32.** pack the harvested marigold flowers in gunny bags or bamboo baskets
- PC33.** maintain the record of harvesting and processing of marigold flowers

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the criteria for selecting a site for marigold crop cultivation such as recommended temperature, exposure to the sunlight and not prone to waterlogging

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- KU2.** the characteristics of soil suitable for marigold cultivation such as the recommended alkalinity, salinity, acidity and pH levels
- KU3.** the process of carrying out ploughing and harrowing in the field and creating ridges and furrows of the recommended dimensions
- KU4.** the process of disinfecting the soil using the recommended chemicals
- KU5.** the process of installing an irrigation or fertigation system
- KU6.** the importance of creating drains in the field for effective drainage of water
- KU7.** the criteria for selecting an appropriate variety of marigold to be grown according to the region
- KU8.** the importance of mixing sand and farmyard manure in the soil in the quantity recommended for marigold flower crop
- KU9.** the criteria for selecting an appropriate variety of marigold to be grown according to the region
- KU10.** different methods of propagating marigold saplings such as terminal seeding or cuttings
- KU11.** the process of treating the marigold seeds with the recommended pesticide or insecticide before sowing
- KU12.** the importance of protecting the marigold saplings from excessive heat/ cold and strong winds
- KU13.** the importance of maintaining the recommended moisture levels in the nursery bed for optimum growth of marigold saplings
- KU14.** the process of harvesting and transplanting marigold saplings in the field, and the recommended planting density to be maintained
- KU15.** immediate care to be given to saplings after being transplanted
- KU16.** the recommended irrigation schedule for marigold plants
- KU17.** the practice of pinching to induce the growth of lateral branches and installing appropriate support to train the plants
- KU18.** the importance and process of weeding out unwanted plants growing among marigold plants
- KU19.** different signs of pests and disease in marigold plants and their recommended treatment
- KU20.** the importance of removing dead leaves and branches from marigold plants
- KU21.** the recommended organic and inorganic fertilisers to be used for marigold flower crop
- KU22.** the indicators of the readiness of marigold flowers for being harvested
- KU23.** the use of appropriate implements such as secateurs for harvesting the marigold flowers
- KU24.** the importance of ensuring no damage to flowers during harvesting
- KU25.** the applicable criteria for sorting and grading the harvested marigold flowers
- KU26.** the process of preparing and applying the preservative solution on marigold flowers to preserve their freshness
- KU27.** the process of packing marigold flowers in appropriate packing material such as gunny bags or bamboo baskets

## Generic Skills (GS)

User/individual on the job needs to know how to:

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- GS1.** maintain work-related records
- GS2.** read and follow the health and safety instructions
- GS3.** listen attentively to understand the information/ instructions being shared by the speaker
- GS4.** communicate clearly and politely
- GS5.** plan and prioritise tasks to ensure timely completion
- GS6.** identify possible disruptions to work and take appropriate preventive measures
- GS7.** take quick decisions to deal with workplace emergencies/ accidents
- GS8.** evaluate all possible solutions to a problem to select the best one
- GS9.** co-ordinate with the co-workers to achieve work objectives

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Select the site and prepare the field</i>	<b>8</b>	<b>10</b>	-	<b>8</b>
<b>PC1.</b> select a site for marigold cultivation with the required temperature and exposure to the sunlight for the optimum growth of plants	-	-	-	-
<b>PC2.</b> ensure the site does not experience waterlogging	-	-	-	-
<b>PC3.</b> ensure the soil is well-drained and loamy with the recommended alkalinity, salinity, acidity and pH levels	-	-	-	-
<b>PC4.</b> carry out ploughing and harrowing in the field, and create ridges and furrows of recommended dimensions	-	-	-	-
<b>PC5.</b> apply farmyard manure in the field in the recommended quantity	-	-	-	-
<b>PC6.</b> disinfect the soil using the recommended chemicals as per the prescription	-	-	-	-
<b>PC7.</b> install the appropriate irrigation or fertigation system in the field	-	-	-	-
<b>PC8.</b> create drains in the field for effective drainage of water	-	-	-	-
<i>Select the marigold variety and propagation method</i>	<b>2</b>	<b>4</b>	-	<b>2</b>
<b>PC9.</b> select the appropriate variety of marigold to be grown according to the region and climate	-	-	-	-
<b>PC10.</b> select an appropriate propagation method for growing marigold saplings such as terminal seeding or cuttings	-	-	-	-
<i>Propagate, harvest and transplant the saplings</i>	<b>6</b>	<b>8</b>	-	<b>6</b>
<b>PC11.</b> treat the marigold seeds with the recommended pesticide or insecticide before sowing	-	-	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC12.</b> propagate marigold saplings in the required quantity in the nursery, protecting them from strong winds, and excessive heat and cold	-	-	-	-
<b>PC13.</b> maintain the recommended level of moisture in the nursery bed for the optimum growth of saplings	-	-	-	-
<b>PC14.</b> harvest the marigold saplings from the nursery bed they when are ready for being transplanted	-	-	-	-
<b>PC15.</b> transplant marigold saplings in the field at the recommended depth and planting density, protecting them from damage	-	-	-	-
<b>PC16.</b> press soil around the root zone to avoid the formation of air pockets	-	-	-	-
<b>PC17.</b> water the saplings with the recommended quantity and apply fertilisers in an appropriate quantity immediately after transplanting	-	-	-	-
<i>Maintain the marigold plants</i>	<b>8</b>	<b>10</b>	-	<b>6</b>
<b>PC18.</b> apply the recommended organic and inorganic fertilisers in the prescribed quantity at appropriate intervals	-	-	-	-
<b>PC19.</b> check the marigold plants regularly for signs of pests and disease	-	-	-	-
<b>PC20.</b> apply the recommended pesticide or insecticide as per the prescription	-	-	-	-
<b>PC21.</b> water the marigold plants with the recommended quantity as per the irrigation schedule and prevailing weather conditions	-	-	-	-
<b>PC22.</b> drain out any water accumulated in the field	-	-	-	-
<b>PC23.</b> carry out pinching to induce the growth of lateral branches	-	-	-	-
<b>PC24.</b> remove dead leaves and branches from marigold plants	-	-	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC25.</b> carry out weeding at the recommended intervals to remove unwanted plants growing among the marigold plants	-	-	-	-
<i>Carry out harvesting and post-harvest management</i>	<b>6</b>	<b>8</b>	-	<b>8</b>
<b>PC26.</b> check the marigold flowers to ensure their maturity for being harvested	-	-	-	-
<b>PC27.</b> arrange the appropriate implements and accessories such as secateurs, crate or baskets for harvesting and collecting the marigold flowers	-	-	-	-
<b>PC28.</b> irrigate the marigold plants before harvesting	-	-	-	-
<b>PC29.</b> harvest the marigold flowers with or without stalk as per the market requirements, ensuring no damage to flowers and plants	-	-	-	-
<b>PC30.</b> collect the harvested flowers in appropriate baskets or containers and store them at the recommended temperature and humidity	-	-	-	-
<b>PC31.</b> sort and grade marigold flowers on the basis of applicable parameters	-	-	-	-
<b>PC32.</b> pack the harvested marigold flowers in gunny bags or bamboo baskets	-	-	-	-
<b>PC33.</b> maintain the record of harvesting and processing of marigold flowers	-	-	-	-
<b>NOS Total</b>	<b>30</b>	<b>40</b>	-	<b>30</b>

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	AGR/N0723
<b>NOS Name</b>	Carry out cultivation of marigold flowers
<b>Sector</b>	Agriculture
<b>Sub-Sector</b>	Agriculture Crop Production
<b>Occupation</b>	Floriculture Farming
<b>NSQF Level</b>	4
<b>Credits</b>	2
<b>Version</b>	2.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	17/11/2025
<b>NSQC Clearance Date</b>	17/11/2022

## Assessment Guidelines and Assessment Weightage

### Assessment Guidelines

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down the proportion of marks for Theory and Skills Practical for each PC.
2. The assessment for the theory part will be based on the knowledge bank of questions created by the SSC.
3. Individual assessment agencies will create unique question papers for the theory part for each candidate at each examination/training centre (as per assessment criteria below).
4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training centre based on these criteria.
5. In case of successfully passing only a certain number of NOSs, the trainee is eligible to take a

## Qualification Pack

subsequent assessment on the balance NOS's to pass the Qualification Pack.

6. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack

### Minimum Aggregate Passing % at QP Level : 70

**(Please note:** Every Trainee should score a minimum aggregate passing percentage as specified above, to successfully clear the Qualification Pack assessment.)

## Assessment Weightage

Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
AGR/N0701.Prepare for the cultivation of flower crop	30	40	-	30	100	10
AGR/N0718.Propagate flower plant saplings	30	40	-	30	100	10
AGR/N0702.Harvest, transplant and maintain saplings to grow flowers	30	40	-	30	100	15
AGR/N0703.Carry out harvesting and post-harvest management of flower crop	30	40	-	30	100	15
AGR/N9908.Undertake basic entrepreneurial activities for small enterprise	30	40	-	30	100	10
AGR/N9922.Engage in collective farming/activity	30	40	-	30	100	5
AGR/N9903.Maintain health and safety at the workplace	40	25	-	35	100	5
DGT/VSQ/N0102.Employability Skills (60 Hours)	20	30	0	0	50	5
<b>Total</b>	<b>240</b>	<b>295</b>	<b>0</b>	<b>0</b>	<b>750</b>	<b>75</b>

Elective: 1 Rose

### Qualification Pack

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
AGR/N0719.Carry out cultivation of rose flowers	30	40	-	30	100	25
<b>Total</b>	<b>30</b>	<b>40</b>	<b>-</b>	<b>30</b>	<b>100</b>	<b>25</b>

Elective: 2 Gerbera

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
AGR/N0720.Carry out cultivation of gerbera flowers	30	40	-	30	100	25
<b>Total</b>	<b>30</b>	<b>40</b>	<b>-</b>	<b>30</b>	<b>100</b>	<b>25</b>

Elective: 3 Chrysanthemum

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
AGR/N0721.Carry out cultivation of chrysanthemum flowers	30	40	-	30	100	25
<b>Total</b>	<b>30</b>	<b>40</b>	<b>-</b>	<b>30</b>	<b>100</b>	<b>25</b>

Elective: 4 Orchid

### Qualification Pack

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
AGR/N0722.Carry out cultivation of orchid flowers	30	40	-	30	100	25
<b>Total</b>	<b>30</b>	<b>40</b>	<b>-</b>	<b>30</b>	<b>100</b>	<b>25</b>

Elective: 5 Marigold

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
AGR/N0723.Carry out cultivation of marigold flowers	30	40	-	30	100	25
<b>Total</b>	<b>30</b>	<b>40</b>	<b>-</b>	<b>30</b>	<b>100</b>	<b>25</b>

## Qualification Pack

### Acronyms

<b>NOS</b>	National Occupational Standard(s)
<b>NSQF</b>	National Skills Qualifications Framework
<b>QP</b>	Qualifications Pack
<b>TVET</b>	Technical and Vocational Education and Training
<b>PPE</b>	Personal Protective Equipment

## Qualification Pack

### Glossary

<b>Sector</b>	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.
<b>Sub-sector</b>	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
<b>Occupation</b>	Occupation is a set of job roles, which perform similar/ related set of functions in an industry.
<b>Job role</b>	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
<b>Occupational Standards (OS)</b>	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the Knowledge and Understanding (KU) they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
<b>Performance Criteria (PC)</b>	Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
<b>National Occupational Standards (NOS)</b>	NOS are occupational standards which apply uniquely in the Indian context.
<b>Qualifications Pack (QP)</b>	QP comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A QP is assigned a unique qualifications pack code.
<b>Unit Code</b>	Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'
<b>Unit Title</b>	Unit title gives a clear overall statement about what the incumbent should be able to do.
<b>Description</b>	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
<b>Scope</b>	Scope is a set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on quality of performance required.

## Qualification Pack

<b>Knowledge and Understanding (KU)</b>	Knowledge and Understanding (KU) are statements which together specify the technical, generic, professional and organisational specific knowledge that an individual needs in order to perform to the required standard.
<b>Organisational Context</b>	Organisational context includes the way the organisation is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
<b>Technical Knowledge</b>	Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
<b>Core Skills/ Generic Skills (GS)</b>	Core skills or Generic Skills (GS) are a group of skills that are the key to learning and working in today's world. These skills are typically needed in any work environment in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles.
<b>Electives</b>	Electives are NOS/set of NOS that are identified by the sector as contributive to specialization in a job role. There may be multiple electives within a QP for each specialized job role. Trainees must select at least one elective for the successful completion of a QP with Electives.
<b>Options</b>	Options are NOS/set of NOS that are identified by the sector as additional skills. There may be multiple options within a QP. It is not mandatory to select any of the options to complete a QP with Options.