

Qualification Pack



Medicinal and Aromatic Plants Grower

QP Code: AGR/Q0901

Version: 3.0

NSQF Level: 4

Agriculture Skill Council of India || 6th Floor, GNG Tower, Plot No. 10, Sector -44, Gurgaon
Haryana-122004 || email:shrinkhala@asci-india.com

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AGR/Q0901: Medicinal and Aromatic Plants Grower

Brief Job Description

A Medicinal and Aromatic Plants (MAPs) Grower is responsible for growing medicinal and aromatic plants. In the process, the individual selects a suitable site for cultivation; prepares the site; carries out cultivation and harvests the plants on their maturity. The person also performs post-harvest processing of MAPs including cleaning, packing and labelling.

Personal Attributes

The individual must be physically fit to work for long durations. The person must have attention to detail, problem-solving skills and the ability to co-ordinate with others to achieve the work objectives. Good verbal and written communication skills are the other important attributes required in this job role.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. [AGR/N0901: Prepare for the cultivation of MAPs](#)
2. [AGR/N0902: Carry out cultivation of MAPs](#)
3. [AGR/N0903: Carry out harvesting, post-harvest processing and marketing of MAPs](#)
4. [AGR/N9908: Undertake basic entrepreneurial activities for small enterprise](#)
5. [AGR/N9922: Engage in collective farming/activity](#)
6. [AGR/N9903: Maintain health and safety at the workplace](#)
7. [DGT/VSQ/N0102: Employability Skills \(60 Hours\)](#)

Qualification Pack (QP) Parameters

Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Medicinal and Aromatic Plants Cultivation
Country	India
NSQF Level	4

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Credits	13
Aligned to NCO/ISCO/ISIC Code	NCO-2015/6115
Minimum Educational Qualification & Experience	10th Class with 2 Years of experience relevant experience OR 10th Class (Pass and pursuing continuous regular schooling) OR 8th Class (Pass) with 4 Years of experience relevant experience OR Certificate-NSQF (Level-3 with minimum education as 5th grade pass) with 2 Years of experience relevant experience
Minimum Level of Education for Training in School	
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years
Last Reviewed On	NA
Next Review Date	27/01/2025
NSQC Approval Date	27/01/2022
Version	3.0
Reference code on NQR	2022/AGR/ASCI/06522
NQR Version	1.0

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AGR/N0901: Prepare for the cultivation of MAPs

Description

This OS unit is about preparing to cultivate medicinal and aromatic plants. It includes selecting and preparing the site along with procuring and preparing the propagation material.

Scope

The scope covers the following :

- Select the site for cultivation
- Prepare the field for cultivation
- Plan nursery propagation
- Procure and prepare the plant propagation material

Elements and Performance Criteria

Select the site for cultivation

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

- PC1.** check the site's meteorological data to ensure it has suitable weather conditions for the cultivation of medicinal and aromatic plants, along with the required exposure to sunlight and effective drainage
- PC2.** ensure the site is situated away from any graveyards/ crematorium and is free from toxic elements such as industrial wastes and effluents
- PC3.** ensure the availability of a reliable source of clean water for irrigation along with labour for the farm
- PC4.** co-ordinate with an approved lab to ensure the total salt concentration, Sodium absorption ratio, Bicarbonate, Boron concentration and micro-pollutants in the water are within the prescribed limits
- PC5.** ensure the site has accessibility to the relevant markets for the purchase/ regular supply of required inputs and sale of medicinal and aromatic plants grown at the farm
- PC6.** ensure the site has adequate shading for any plants that require shading for optimal growth

Prepare the field for cultivation

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

- PC7.** co-ordinate with an authorised lab for soil profiling and soil analysis to determine the physicochemical properties and texture of the soil
- PC8.** ensure the soil is suitable for the selected MAP crop with the required water holding capacity
- PC9.** apply the lab-recommended treatment(s) in the prescribed quantity to improve the soil fertility and adjust the pH levels
- PC10.** remove rocks, stumps, debris, and shrubs from the field
- PC11.** till the soil to the recommended tilth to remove weeds and facilitate a favourable environment for planting seeds and seedlings

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- PC12.** prepare the field and/ or mother bed using the appropriate tools and implements safely, following the recommended practices to provide a better rhizospheric environment, soil structure and texture
- PC13.** erect fences of the recommended height around the field to protect it from external threats such as stray animals
- PC14.** plant appropriate windbreaks in the field to protect the crop from strong winds and prevent soil erosion

Plan nursery propagation

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

- PC15.** plan the core nursery activities such as sowing, watering, weeding, nutrient management, pest and disease management, etc.
- PC16.** prepare an appropriate nursery structure for the hygienic propagation of commercially-important MAPs

Procure and prepare the plant propagation material

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

- PC17.** select the appropriate MAPs to be grown according to the agro-climatic conditions, market demand and profitability
- PC18.** procure seeds and propagation material from an authorised seller, ensuring their quality and no damage
- PC19.** ensure the ready-to-transplant saplings or root cuttings are uniform in size and maturity, both in terms of aerial and underground parts
- PC20.** determine the correct variety of plant(s) while collecting the planting material from the wild
- PC21.** check the seeds and planting material to ensure they are free from pests, infection, diseases and any foreign or inert matter
- PC22.** ensure the seeds chosen for cultivation meet the botanical and varietal purity, are mature and from a recent seed lot
- PC23.** carry out the prescribed seed treatment according to the target species and planting season
- PC24.** carry out seedling production following the recommended agronomic practices for the target species under the nursery conditions
- PC25.** ensure seedling production is carried according to the field transplantation schedule
- PC26.** collect stem cuttings from authentic sources for root induction under nursery conditions and subsequent transplantation into the field
- PC27.** ensure the stem cuttings have uniform length and diameter according to the requirements laid down for the target species

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the practices related to conservation and sustainable use of MAPs
- KU2.** the bio-geographical distribution of different types of MAPs
- KU3.** the applicable environmental and human health perspectives
- KU4.** the importance and benefits of cultivating of MAPs
- KU5.** relevant issues encountered at various stages of production of MAPs

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- KU6.** the factors related to species rarity of medicinal plants
- KU7.** applicable conservation strategies for varieties of MAPs
- KU8.** the criteria for selecting a site for the cultivation of medicinal and aromatic plants, such as recommended sunlight exposure, effective drainage, availability of effluent and toxin-free water, conducive weather, etc.
- KU9.** the importance and process of carrying out soil profiling and soil analysis to determine the physicochemical properties and texture of the soil
- KU10.** how to check the suitability of the soil for a crop and its water holding capacity
- KU11.** the recommended treatment(s) to be applied to the soil to improve its fertility
- KU12.** the importance of tilling the soil to the recommended tilth to facilitate a favourable environment for growing seeds and seedlings
- KU13.** the safe use of the relevant field preparation tools, implements, and PPE
- KU14.** the recommended practices to be followed to provide better soil structure, texture and rhizospheric environment
- KU15.** the importance of erecting fences to protect the field from external threats
- KU16.** the importance of procuring seeds and propagation material from an authorised seller
- KU17.** the importance of ensuring the ready-to-transplant saplings or root cuttings are uniform in size and maturity
- KU18.** the principles of raising and managing seedlings in a nursery
- KU19.** the precautions to be taken while collecting the planting material from the wild
- KU20.** the importance of ensuring that seeds and planting material are free from pests, infection, diseases and any foreign or inert matter
- KU21.** how to check the seeds chosen for cultivation meet the botanical and varietal purity, and are mature
- KU22.** the process of treating seeds according to the target species and planting season
- KU23.** the recommended agronomic practices to be followed for seedling production according to the target species
- KU24.** the importance of ensuring seedling production is carried out in the nursery according to the field transplantation schedule
- KU25.** the importance of collecting stem cuttings from authentic sources for root induction and ensuring they are uniform in length and diameter

Generic Skills (GS)

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

- GS1.** write work-related notes and records
- GS2.** read the relevant literature to get the latest updates about the field of work
- GS3.** communicate politely and professionally
- GS4.** listen attentively to understand the information/ instructions being shared
- GS5.** plan and schedule tasks for efficient use of time
- GS6.** co-ordinate with the co-workers to achieve the work objectives
- GS7.** take quick decisions to deal with any emergencies/ accidents



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GS8. evaluate all possible solutions to a problem to select the best one

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Select the site for cultivation</i>	10	14	-	9
PC1. check the site's meteorological data to ensure it has suitable weather conditions for the cultivation of medicinal and aromatic plants, along with the required exposure to sunlight and effective drainage	-	-	-	-
PC2. ensure the site is situated away from any graveyards/ crematorium and is free from toxic elements such as industrial wastes and effluents	-	-	-	-
PC3. ensure the availability of a reliable source of clean water for irrigation along with labour for the farm	-	-	-	-
PC4. co-ordinate with an approved lab to ensure the total salt concentration, Sodium absorption ratio, Bicarbonate, Boron concentration and micro-pollutants in the water are within the prescribed limits	-	-	-	-
PC5. ensure the site has accessibility to the relevant markets for the purchase/ regular supply of required inputs and sale of medicinal and aromatic plants grown at the farm	-	-	-	-
PC6. ensure the site has adequate shading for any plants that require shading for optimal growth	-	-	-	-
<i>Prepare the field for cultivation</i>	6	8	-	10
PC7. co-ordinate with an authorised lab for soil profiling and soil analysis to determine the physicochemical properties and texture of the soil	-	-	-	-
PC8. ensure the soil is suitable for the selected MAP crop with the required water holding capacity	-	-	-	-
PC9. apply the lab-recommended treatment(s) in the prescribed quantity to improve the soil fertility and adjust the pH levels	-	-	-	-
PC10. remove rocks, stumps, debris, and shrubs from the field	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. till the soil to the recommended tilth to remove weeds and facilitate a favourable environment for planting seeds and seedlings	-	-	-	-
PC12. prepare the field and/ or mother bed using the appropriate tools and implements safely, following the recommended practices to provide a better rhizospheric environment, soil structure and texture	-	-	-	-
PC13. erect fences of the recommended height around the field to protect it from external threats such as stray animals	-	-	-	-
PC14. plant appropriate windbreaks in the field to protect the crop from strong winds and prevent soil erosion	-	-	-	-
<i>Plan nursery propagation</i>	4	6	-	3
PC15. plan the core nursery activities such as sowing, watering, weeding, nutrient management, pest and disease management, etc.	-	-	-	-
PC16. prepare an appropriate nursery structure for the hygienic propagation of commercially-important MAPs	-	-	-	-
<i>Procure and prepare the plant propagation material</i>	10	12	-	8
PC17. select the appropriate MAPs to be grown according to the agro-climatic conditions, market demand and profitability	-	-	-	-
PC18. procure seeds and propagation material from an authorised seller, ensuring their quality and no damage	-	-	-	-
PC19. ensure the ready-to-transplant saplings or root cuttings are uniform in size and maturity, both in terms of aerial and underground parts	-	-	-	-
PC20. determine the correct variety of plant(s) while collecting the planting material from the wild	-	-	-	-
PC21. check the seeds and planting material to ensure they are free from pests, infection, diseases and any foreign or inert matter	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC22. ensure the seeds chosen for cultivation meet the botanical and varietal purity, are mature and from a recent seed lot	-	-	-	-
PC23. carry out the prescribed seed treatment according to the target species and planting season	-	-	-	-
PC24. carry out seedling production following the recommended agronomic practices for the target species under the nursery conditions	-	-	-	-
PC25. ensure seedling production is carried according to the field transplantation schedule	-	-	-	-
PC26. collect stem cuttings from authentic sources for root induction under nursery conditions and subsequent transplantation into the field	-	-	-	-
PC27. ensure the stem cuttings have uniform length and diameter according to the requirements laid down for the target species	-	-	-	-
NOS Total	30	40	-	30

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National Occupational Standards (NOS) Parameters

NOS Code	AGR/N0901
NOS Name	Prepare for the cultivation of MAPs
Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Medicinal and Aromatic Plant Cultivation
NSQF Level	4
Credits	2
Version	2.0
Last Reviewed Date	27/01/2022
Next Review Date	27/01/2025
NSQC Clearance Date	27/01/2022

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AGR/N0902: Carry out cultivation of MAPs

Description

This OS unit is about carrying out the cultivation of medicinal and aromatic plants that includes planting and maintaining them.

Scope

The scope covers the following :

- Plant and transplant the seeds and seedlings
- Carry out irrigation and water management
- Carry out plant nutrition management
- Carry out weed management
- Carry out pest and disease management
- Optimise resource utilisation
- Perform waste management

Elements and Performance Criteria

Plant and transplant the seeds and seedlings

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

- PC1.** check the weather conditions using the government-approved weather forecasting mobile application or website and select an appropriate time for planting and transplanting seeds and seedlings
- PC2.** uproot healthy seedling from the nursery bed at their optimum stage of growth and transplant them in the field within the recommended time duration
- PC3.** plant seeds and seedlings in rows as per the layout, maintaining the recommended depth, spacing and moisture
- PC4.** replenish the plant populations to compensate for losses due to mortality or damage in a timely manner, considering the gestation period of the target crop

Carry out irrigation and water management

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

- PC5.** determine the water requirement of the planted medicinal and aromatic plants
- PC6.** plan the irrigation cycles and implement them to ensure optimal plant growth
- PC7.** use an efficient irrigation or fertigation system to optimise the usage of water
- PC8.** follow the recommended water harvesting and conservation practices
- PC9.** ensure the quality of water through regular testing using an authorised laboratory
- PC10.** drain out the excess water from the field

Carry out plant nutrition management

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

- PC11.** determine the micro and macronutrient needs of the plants
- PC12.** apply the appropriate organic and inorganic fertilisers such as manure and compost to plants as per the requirement

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- PC13.** ensure mineral supplements are used based on a soil analysis conducted for the target crops in an approved laboratory
- PC14.** arrange for specialised nutritional care for distinct purposes such as root production or enhancement of leafy bio-mass according to the recommended agronomic practices for the target species

Carry out weed management

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

- PC15.** carry out weeding and hoeing following the recommended cycles to maintain a weed-free field
- PC16.** carry out the recommended inter-cultural operations such as topping, nipping of buds, pruning, shading, earthing up, etc.
- PC17.** apply the appropriate herbicides and weedicides in the recommended quantity and follow the relevant Good Agricultural Practices (GAPs) to control the growth of weeds

Carry out pest and disease management

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

- PC18.** follow the Integrated Pest Management (IPM) practices along with the recommended traditional practices to control pests and disease organically
- PC19.** check the plants regularly to identify pest and disease infestation
- PC20.** apply the recommended pesticides and insecticides in the recommended dose and an appropriate time to free the plants from the identified pests and diseases
- PC21.** follow the recommended mode of pesticide or insecticide application, ensuring personal protection with the use of relevant Personal Protection Equipment (PPE)

Optimise resource utilisation

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

- PC22.** optimise the usage of electricity and relevant materials in various tasks and processes
- PC23.** connect electrical tools and equipment safely and turn off when not in use
- PC24.** plug water leakages to prevent its wastage

Perform waste management

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

- PC25.** segregate waste into appropriate categories
- PC26.** recycle the recyclable waste appropriately and dispose the non-recyclable waste in an environment-friendly manner

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** use of the relevant weather forecasting mobile application or website
- KU2.** appropriate stage of growth of seedlings to be transplanted in the field from the nursery bed
- KU3.** the importance of transplanting seedlings within the recommended time duration
- KU4.** appropriate depth, spacing and moisture to be maintained while planting seedlings
- KU5.** how to determine the water requirement of a variety of medicinal and aromatic plants
- KU6.** the process of planning and implementing irrigation cycle to ensure optimal growth of plants

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- KU7.** use of irrigation or fertigation system for optimal use of water
- KU8.** various water harvesting and conservation practices
- KU9.** applicable Good Agricultural Practices (GAPs) for MAPs
- KU10.** the importance of ensuring the quality of water used for irrigating medicinal and aromatic plants
- KU11.** how to determine the micro and macronutrient needs of medicinal and aromatic plants
- KU12.** the process of applying different types of organic and inorganic fertilizers, manure and compost to plants
- KU13.** use of mineral supplements specialised nutritional care for distinct purposes such as root production or enhancement of leafy bio-mass in the target species
- KU14.** various weed management practices and inter-cultural practices such as topping, nipping of buds, pruning, shading, earthing up, etc.
- KU15.** safe use of herbicides, weedicides, insecticides and pesticides
- KU16.** recommended Integrated Pest Management (IPM) practices to be followed to control pests and disease in medicinal and aromatic plants
- KU17.** signs of pest and disease infestation in medicinal and aromatic plants
- KU18.** use of the appropriate Personal Protection Equipment (PPE) for applying using herbicides, weedicides, insecticides and pesticides
- KU19.** the recommended practices to be followed to prevent transmission of pests and disease from diseased to healthy plants
- KU20.** benefits of resource optimisation
- KU21.** the criteria for segregating waste into appropriate categories
- KU22.** how to recycle and dispose different types of waste

Generic Skills (GS)

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

- GS1.** make work-related notes and records
- GS2.** read and interpret the relevant guides and manuals
- GS3.** communicate politely and professionally
- GS4.** take quick decisions to resolve work-related issues and minimise the impact on productivity
- GS5.** listen attentively to understand the information being shared
- GS6.** plan and prioritise tasks to ensure timely completion
- GS7.** evaluate all possible solutions to a problem to select the best one
- GS8.** 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>Plant and transplant the seeds and seedlings</i>	4	8	-	6
PC1. check the weather conditions using the government-approved weather forecasting mobile application or website and select an appropriate time for planting and transplanting seeds and seedlings	-	-	-	-
PC2. uproot healthy seedling from the nursery bed at their optimum stage of growth and transplant them in the field within the recommended time duration	-	-	-	-
PC3. plant seeds and seedlings in rows as per the layout, maintaining the recommended depth, spacing and moisture	-	-	-	-
PC4. replenish the plant populations to compensate for losses due to mortality or damage in a timely manner, considering the gestation period of the target crop	-	-	-	-
<i>Carry out irrigation and water management</i>	6	8	-	4
PC5. determine the water requirement of the planted medicinal and aromatic plants	-	-	-	-
PC6. plan the irrigation cycles and implement them to ensure optimal plant growth	-	-	-	-
PC7. use an efficient irrigation or fertigation system to optimise the usage of water	-	-	-	-
PC8. follow the recommended water harvesting and conservation practices	-	-	-	-
PC9. ensure the quality of water through regular testing using an authorised laboratory	-	-	-	-
PC10. drain out the excess water from the field	-	-	-	-
<i>Carry out plant nutrition management</i>	4	6	-	4
PC11. determine the micro and macronutrient needs of the plants	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. apply the appropriate organic and inorganic fertilisers such as manure and compost to plants as per the requirement	-	-	-	-
PC13. ensure mineral supplements are used based on a soil analysis conducted for the target crops in an approved laboratory	-	-	-	-
PC14. arrange for specialised nutritional care for distinct purposes such as root production or enhancement of leafy bio-mass according to the recommended agronomic practices for the target species	-	-	-	-
<i>Carry out weed management</i>	4	4	-	4
PC15. carry out weeding and hoeing following the recommended cycles to maintain a weed-free field	-	-	-	-
PC16. carry out the recommended inter-cultural operations such as topping, nipping of buds, pruning, shading, earthing up, etc.	-	-	-	-
PC17. apply the appropriate herbicides and weedicides in the recommended quantity and follow the relevant Good Agricultural Practices (GAPs) to control the growth of weeds	-	-	-	-
<i>Carry out pest and disease management</i>	6	10	-	6
PC18. follow the Integrated Pest Management (IPM) practices along with the recommended traditional practices to control pests and disease organically	-	-	-	-
PC19. check the plants regularly to identify pest and disease infestation	-	-	-	-
PC20. apply the recommended pesticides and insecticides in the recommended dose and an appropriate time to free the plants from the identified pests and diseases	-	-	-	-
PC21. follow the recommended mode of pesticide or insecticide application, ensuring personal protection with the use of relevant Personal Protection Equipment (PPE)	-	-	-	-
<i>Optimise resource utilisation</i>	4	2	-	4

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC22. optimise the usage of electricity and relevant materials in various tasks and processes	-	-	-	-
PC23. connect electrical tools and equipment safely and turn off when not in use	-	-	-	-
PC24. plug water leakages to prevent its wastage	-	-	-	-
<i>Perform waste management</i>	2	2	-	2
PC25. segregate waste into appropriate categories	-	-	-	-
PC26. recycle the recyclable waste appropriately and dispose the non-recyclable waste in an environment-friendly manner	-	-	-	-
NOS Total	30	40	-	30

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National Occupational Standards (NOS) Parameters

NOS Code	AGR/N0902
NOS Name	Carry out cultivation of MAPs
Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Medicinal and Aromatic Plant Cultivation
NSQF Level	4
Credits	2
Version	3.0
Last Reviewed Date	NA
Next Review Date	27/01/2025
NSQC Clearance Date	27/01/2022

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AGR/N0903: Carry out harvesting, post-harvest processing and marketing of MAPs

Description

This OS unit is about carrying out harvesting, post-harvest processing and marketing of MAPs.

Scope

The scope covers the following :

- Harvest the MAPs
- Process the MAPs
- Pack and store the processed MAPs
- Market the MAPs

Elements and Performance Criteria

Harvest the MAPs

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

- PC1.** determine the appropriate time for harvesting based on required quality parameters set for the end product
- PC2.** check the MAPs to ensure they meet the required quality standards for harvesting
- PC3.** arrange the required tools and equipment for harvesting the MAPs
- PC4.** harvest the MAPs protecting them from soil contamination and avoiding incidental and concurrent harvesting of weeds
- PC5.** collect the MAPs in clean containers taking necessary precautions to avoid cross contamination with other species and other extraneous matters
- PC6.** isolate and dispose the toxic weeds following the recommended practices

Process the MAPs

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

- PC7.** clean the harvested MAPs following the recommended methods such as dry cleaning, wet cleaning or a combination of both
- PC8.** follow the recommended drying technique to dry the MAPs along with appropriate practices to avoid contamination
- PC9.** store the dry MAPs under the recommended temperature, humidity and hygienic conditions for an appropriate duration to prevent rotting or degradation
- PC10.** ensure the processing and storage areas are clean, well-ventilated, and protected from direct sunlight, dust, rain, rodents, insects and livestock
- PC11.** carry out sorting and grading of the MAPs on relevant parameters
- PC12.** select the appropriate packaging material based on the type of produce, quality requirements, and the expected length of storage before consumption

Pack and store the processed MAPs

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

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- PC13.** follow the recommended practices to protect the processed MAPs and packing material from damage and keep them clean and dry
- PC14.** pack the dried MAPs taking necessary precautions to avoid undue compacting
- PC15.** apply labels on the packed MAPs with the necessary information in compliance with the regulatory requirements
- PC16.** apply the necessary treatment in the storage area to protect the packed MAPs from pests, insects and rodents
- PC17.** maintain the recommended temperature, humidity and hygiene in the storage area
- PC18.** store the organic herbs, non-organic products and produce with strong aromatic compounds separately in batches, avoiding mix up and cross-contamination
- PC19.** follow the applicable GAPs and sustainable practices to ensure quality of produce and protection of environment as per the applicable regulatory standards

Market the MAPs

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

- PC20.** identify the market demand and relevant market/ buyers for MAPs, such as eMandi, local traders, exporters, etc.
- PC21.** negotiate with the buyer(s) for a profitable price
- PC22.** arrange an appropriate mode of transport for delivering MAPs to the buyer in a safe and hygienic condition
- PC23.** process the payments using the buyer-preferred e-payment method
- PC24.** maintain the manual and/ or electronic record of sales and payments 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 practice of determining an appropriate time for harvesting MAPs based on the required quality parameters set for the end product
- KU2.** the process of checking MAPs to ensure they meet the appropriate quality standards required for harvesting
- KU3.** the use of appropriate harvesting tools and equipment
- KU4.** how to harvest plants protecting them from soil contamination, avoiding incidental and concurrent harvesting of weeds
- KU5.** the infrastructure required for post-harvest management of MAPs
- KU6.** the relevant practices to be followed to avoid cross-contamination with other varieties, and extraneous matters during the harvesting
- KU7.** the relevant practices to be followed to isolate and dispose toxic weeds
- KU8.** the different methods of cleaning the harvested MAPs, such as dry cleaning, wet cleaning or a combination of both
- KU9.** the process of drying medicinal and aromatic plants using appropriate accessories such as trays to prevent contamination during the process
- KU10.** the recommended temperature, humidity and hygienic conditions for storing the dry MAPs

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- KU11.** the importance of ensuring clean and well-ventilated processing and storage areas and protecting them from direct sunlight, dust, rain, rodents, insects and livestock
- KU12.** the relevant parameters for sorting and grading MAPs
- KU13.** the appropriate packaging material to be used for packing processed MAPs
- KU14.** the recommended practices to be followed to protect the packing material from damage and keep it clean and dry
- KU15.** the necessary precautions to be taken to prevent undue compacting of dried plants during packing
- KU16.** the process of labelling the packed plants with the necessary information in compliance with the regulatory requirements
- KU17.** the necessary treatment to be applied in the storage area to protect the packed plants from pests, insects and rodents
- KU18.** the importance of maintaining the recommended temperature, humidity and hygiene in the storage area
- KU19.** the importance of storing the organic herbs, non-organic products and produce with strong aromatic compounds separately in batches
- KU20.** the applicable GAPs and sustainable practices to be followed during post-harvest processing of MAPs
- KU21.** the process of identifying market demand and appropriate buyers for MAPs
- KU22.** how to negotiate with buyers
- KU23.** the appropriate mode of transport for MAPs
- KU24.** use of various e-payment methods
- KU25.** how to maintain manual and electronic records using physical registers and relevant computer application

Generic Skills (GS)

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

- GS1.** maintain work-related notes and records
- GS2.** read the relevant guides and manuals
- GS3.** communicate politely and professionally
- GS4.** listen attentively to receive instructions clearly
- GS5.** take quick decisions to resolve work-related problems in a timely manner
- GS6.** plan and prioritise tasks to ensure timely completion
- GS7.** 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>Harvest the MAPs</i>	8	10	-	10
PC1. determine the appropriate time for harvesting based on required quality parameters set for the end product	-	-	-	-
PC2. check the MAPs to ensure they meet the required quality standards for harvesting	-	-	-	-
PC3. arrange the required tools and equipment for harvesting the MAPs	-	-	-	-
PC4. harvest the MAPs protecting them from soil contamination and avoiding incidental and concurrent harvesting of weeds	-	-	-	-
PC5. collect the MAPs in clean containers taking necessary precautions to avoid cross contamination with other species and other extraneous matters	-	-	-	-
PC6. isolate and dispose the toxic weeds following the recommended practices	-	-	-	-
<i>Process the MAPs</i>	8	10	-	10
PC7. clean the harvested MAPs following the recommended methods such as dry cleaning, wet cleaning or a combination of both	-	-	-	-
PC8. follow the recommended drying technique to dry the MAPs along with appropriate practices to avoid contamination	-	-	-	-
PC9. store the dry MAPs under the recommended temperature, humidity and hygienic conditions for an appropriate duration to prevent rotting or degradation	-	-	-	-
PC10. ensure the processing and storage areas are clean, well-ventilated, and protected from direct sunlight, dust, rain, rodents, insects and livestock	-	-	-	-
PC11. carry out sorting and grading of the MAPs on relevant parameters	-	-	-	-

Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. select the appropriate packaging material based on the type of produce, quality requirements, and the expected length of storage before consumption	-	-	-	-
<i>Pack and store the processed MAPs</i>	8	12	-	6
PC13. follow the recommended practices to protect the processed MAPs and packing material from damage and keep them clean and dry	-	-	-	-
PC14. pack the dried MAPs taking necessary precautions to avoid undue compacting	-	-	-	-
PC15. apply labels on the packed MAPs with the necessary information in compliance with the regulatory requirements	-	-	-	-
PC16. apply the necessary treatment in the storage area to protect the packed MAPs from pests, insects and rodents	-	-	-	-
PC17. maintain the recommended temperature, humidity and hygiene in the storage area	-	-	-	-
PC18. store the organic herbs, non-organic products and produce with strong aromatic compounds separately in batches, avoiding mix up and cross-contamination	-	-	-	-
PC19. follow the applicable GAPs and sustainable practices to ensure quality of produce and protection of environment as per the applicable regulatory standards	-	-	-	-
<i>Market the MAPs</i>	6	8	-	4
PC20. identify the market demand and relevant market/ buyers for MAPs, such as eMandi, local traders, exporters, etc.	-	-	-	-
PC21. negotiate with the buyer(s) for a profitable price	-	-	-	-
PC22. arrange an appropriate mode of transport for delivering MAPs to the buyer in a safe and hygienic condition	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC23. process the payments using the buyer-preferred e-payment method	-	-	-	-
PC24. maintain the manual and/ or electronic record of sales and payments using the physical registers and/ or the relevant computer application	-	-	-	-
NOS Total	30	40	-	30

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	AGR/N0903
NOS Name	Carry out harvesting, post-harvest processing and marketing of MAPs
Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Medicinal and Aromatic Plant Cultivation
NSQF Level	4
Credits	3
Version	2.0
Last Reviewed Date	27/01/2022
Next Review Date	27/01/2025
NSQC Clearance Date	27/01/2022

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.

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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

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- 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>	10	14	-	10
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	-	-	-	-
<i>Manage the agricultural production process</i>	8	10	-	8
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	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
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.	-	-	-	-
<i>Manage the post-production and marketing processes</i>	12	16	-	12
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	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
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	-	-	-	-
NOS Total	30	40	-	30

Qualification Pack

National Occupational Standards (NOS) Parameters

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

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- 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

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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>	6	8	-	6
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	-	-	-	-
<i>Prepare for the PG/ FIG/ SHG operations</i>	6	10	-	6
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	-	-	-	-
<i>Conduct group meetings and training sessions</i>	8	6	-	8
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	-	-	-	-

Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Carry out collective farming/ activities</i>	10	16	-	10
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	-	-	-	-
NOS Total	30	40	-	30

Qualification Pack

National Occupational Standards (NOS) Parameters

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

Qualification Pack

- 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>	10	5	-	10
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	-	-	-	-
<i>Maintain clean and safe workplace</i>	15	15	-	15
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	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
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	-	-	-	-
<i>Administer appropriate emergency procedures</i>	15	5	-	10
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	-	-	-	-
NOS Total	40	25	-	35

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National Occupational Standards (NOS) Parameters

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

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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

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Introduction to Employability Skills</i>	1	1	-	-
PC1. identify employability skills required for jobs in various industries	-	-	-	-
PC2. identify and explore learning and employability portals	-	-	-	-
<i>Constitutional values - Citizenship</i>	1	1	-	-
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	-	-	-	-
<i>Becoming a Professional in the 21st Century</i>	2	4	-	-
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	-	-	-	-
<i>Basic English Skills</i>	2	3	-	-
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	-	-	-	-
<i>Career Development & Goal Setting</i>	1	2	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC10. understand the difference between job and career	-	-	-	-
PC11. prepare a career development plan with short- and long-term goals, based on aptitude	-	-	-	-
<i>Communication Skills</i>	2	2	-	-
PC12. follow verbal and non-verbal communication etiquette and active listening techniques in various settings	-	-	-	-
PC13. work collaboratively with others in a team	-	-	-	-
<i>Diversity & Inclusion</i>	1	2	-	-
PC14. communicate and behave appropriately with all genders and PwD	-	-	-	-
PC15. escalate any issues related to sexual harassment at workplace according to POSH Act	-	-	-	-
<i>Financial and Legal Literacy</i>	2	3	-	-
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	-	-	-	-
<i>Essential Digital Skills</i>	3	4	-	-
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	-	-	-	-

Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Entrepreneurship</i>	2	3	-	-
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	-	-	-	-
<i>Customer Service</i>	1	2	-	-
PC26. identify different types of customers	-	-	-	-
PC27. identify and respond to customer requests and needs in a professional manner.	-	-	-	-
PC28. follow appropriate hygiene and grooming standards	-	-	-	-
<i>Getting ready for apprenticeship & Jobs</i>	2	3	-	-
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	-	-	-	-
NOS Total	20	30	-	-

Qualification Pack

National Occupational Standards (NOS) Parameters

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

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 proportion of marks for Theory and Skills Practical for each PC.
2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
3. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below).
4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training center based on these criteria.
5. In case of successfully passing only certain number of NOSs, the trainee is eligible to take

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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/N0901.Prepare for the cultivation of MAPs	30	40	-	30	100	25
AGR/N0902.Carry out cultivation of MAPs	30	40	-	30	100	30
AGR/N0903.Carry out harvesting, post-harvest processing and marketing of MAPs	30	40	-	30	100	25
AGR/N9908.Undertake basic entrepreneurial activities for small enterprise	30	40	-	30	100	5
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
Total	210	255	0	0	650	100

Qualification Pack

Acronyms

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

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Glossary

Sector	Sector is a conglomeration of different business operations having similar business and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
Occupation	Occupation is a set of job roles, which perform similar/ related set of functions in an industry.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
Occupational Standards (OS)	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.
Performance Criteria (PC)	Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
National Occupational Standards (NOS)	NOS are occupational standards which apply uniquely in the Indian context.
Qualifications Pack (QP)	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.
Unit Code	Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'
Unit Title	Unit title gives a clear overall statement about what the incumbent should be able to do.
Description	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.
Scope	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.

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Knowledge and Understanding (KU)	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.
Organisational Context	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.
Technical Knowledge	Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
Core Skills/ Generic Skills (GS)	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.
Electives	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.
Options	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.