

Qualification Pack



Vermicompost Producer (Small Unit)

QP Code: AGR/Q1209

Version: 1.0

NSQF Level: 2

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AGR/Q1209: Vermicompost Producer (Small Unit)

Brief Job Description

The individual is expected to be competent in producing good quality vermicompost using correct species of earthworms, materials, vermicomposting techniques in appropriate site/location. The individual also undertakes basic entrepreneurial activities for small enterprise and sell the produced compost as per the competitive market prices

Personal Attributes

The individual should be easily adaptable in agricultural environment and possess willingness to take up initiatives. The person must be tolerant to handling organic wastes, farm or dairy wastes and should not be vermiphobic or averse to living organisms that thrive in soil/underground. The individual must possess an alert mind, physically active body and be willing to work for long hours in open areas. The Individual must have good communication, facilitation, analytical and organizing skills. The person should independently take decisions.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. [AGR/N1232: Identify appropriate site and prepare bed for vermicompost](#)
2. [AGR/N1233: Inoculate earthworms in prepared unit and manage the vermicompost process](#)
3. [AGR/N1234: Harvest vermicompost using approved procedures](#)
4. [DGT/VSQ/N0101: Employability Skills \(30 Hours\)](#)

Qualification Pack (QP) Parameters

Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Farm Management
Country	India
NSQF Level	2
Credits	7

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Aligned to NCO/ISCO/ISIC Code	NCO-2015/6129.9900
Minimum Educational Qualification & Experience	No formal education prescribed
Minimum Level of Education for Training in School	
Pre-Requisite License or Training	NA
Minimum Job Entry Age	17 Years
Last Reviewed On	NA
Next Review Date	29/09/2026
NSQC Approval Date	29/09/2023
Version	1.0
Reference code on NQR	QG-02-AG-01010-2023-V1-ASCI
NQR Version	1.0

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AGR/N1232: Identify appropriate site and prepare bed for vermicompost

Description

This unit deals with selecting an appropriate site for carrying out vermicomposting. It also covers the key skill sets required for preparation of vermibed using approved procedures and materials.

Scope

The scope covers the following :

- Work safely
- Identify appropriate site for preparing vermicompost
- Construct vermicompost unit
- Prepare bed for vermicomposting
- Post vermibed preparation activities

Elements and Performance Criteria

Work safely

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

- PC1.** comply with occupational health and safety requirements relevant to work
- PC2.** assess possible risks and hazards in the work environment and exercise safety precautions to minimize injury to self and others
- PC3.** comply with relevant safety practices while handling sharp tools and equipment
- PC4.** ensure that the selected tools are in good working condition

Identify appropriate site for preparing vermicompost

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

- PC5.** select suitable location based on factors such as accessibility to road; availability of bio-wastes; good ventilation; etc.
- PC6.** ensure that the selected site is located close to dairy farms or places with high population of cattle to procure cow dung and farm wastes
- PC7.** verify that water resource is available in the vicinity of the vermicomposting area
- PC8.** ensure the availability of farm labour in the selected location
- PC9.** select appropriate vermicomposting method based on various factors

Construct vermicompost unit

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

- PC10.** obtain appropriate tools, accessories and construction raw materials as per the selected vermicomposting method
- PC11.** identify shady area in the selected site to construct the vermicompost unit as per the approved procedures
- PC12.** provide correct, safe and accurate instructions to workers for any construction work and follow the same where contributing to construction

Prepare bed for vermicomposting

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

- PC13.** select the appropriate kind of raw materials to make vermicomposting unit as per resource availability and feasibility, viz. straws, waste paper, saw dusts, corrugated cardboard, dry leaves, corn stalks, etc.
- PC14.** ensure that the bottom of the vermicomposting unit is covered with appropriate materials such as layer of tiles, broken bricks, coarse loamy soil, coconut husk or polythene sheet, etc.
- PC15.** prepare vermicomposting unit of appropriate height/level using suitable raw materials as per approved vermicomposting practices
- PC16.** select appropriate type of organic wastes (free from non-biodegradable materials) required to be used for making vermicomposting heap as per standard requirements
- PC17.** identify reliable source(s) to ensure continuous supply of food material/organic waste required as feeds for vermes/earthworm
- PC18.** verify that organic wastes are shredded into small pieces prior to mixing in accordance with good vermicomposting practices
- PC19.** ensure that the mixture is transferred into the vermicomposting unit following approved procedures or as alternating layers of shredded organic wastes and cow dung slurry in correct proportion
- PC20.** ensure that the layer or height of the heap is maintained as per standard quality requirements

Post vermicomposting preparation activities

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

- PC21.** check that the top layer of the vermicomposting unit is properly covered with soil, cow dung, leaves, straws or other crop wastes as per good vermicomposting practices
- PC22.** ensure that the mixture or heap is allowed to decompose in the vermicomposting unit for required length of days depending on the vermicomposting method selected
- PC23.** check that appropriate moisture level is maintained during the process in line with standard procedure requirements
- PC24.** optimize usage of material including water in various tasks/activities/processes
- PC25.** segregate waste into different categories
- PC26.** dispose non-recyclable waste appropriately
- PC27.** deposit recyclable and reusable material at identified location
- PC28.** leave the work area in a safe condition in line with environmental health and safety

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.** impact of not following the health, hygiene, safety and quality standards on consumers and the business
- KU5.** use of appropriate personal protective equipment suitable to the type of work
- KU6.** range of tools and materials used to construct vermicomposting unit and prepare vermicomposting units

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- KU7.** factors affecting site selection of vercomposting area
- KU8.** different types of vermicomposting methods and how to select the suitable method
- KU9.** quality of materials/inputs used in making vermicompost unit
- KU10.** various types of vermibeds and their specifications
- KU11.** techniques used to prepare vermicomposting beds
- KU12.** different types of organic wastes and their uses
- KU13.** nutrients richly found in vermicompost such as carbon (c), nitrogen (n), phosphate (p), potassium (p), etc.
- KU14.** benefits of vermicompost and vermiwash in enhancing the soil properties
- KU15.** importance of maintaining correct proportion of substrates in a composting unit
- KU16.** length of time allowed for decomposition of organic wastes

Generic Skills (GS)

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

- GS1.** note down expenses incurred during construction and procurement of materials in English or local language
- GS2.** document work related activities in appropriate work-sheet, tracker, register, etc.
- GS3.** comprehend warnings/instructions given on tools and materials such as fungicide or insecticide in English or local language
- GS4.** communicate effectively with subordinates/coworkers
- GS5.** plan and organize work in such a way that all activities are completed in time and as per required specifications
- GS6.** provide good customer service, commit to timeline and maintain service level agreements at all times
- GS7.** seek assistance and support from other sources to solve problems
- GS8.** apply logical reasoning to solve problems or any potential problems related to work

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Work safely</i>	5	5	-	5
PC1. comply with occupational health and safety requirements relevant to work	-	-	-	-
PC2. assess possible risks and hazards in the work environment and exercise safety precautions to minimize injury to self and others	-	-	-	-
PC3. comply with relevant safety practices while handling sharp tools and equipment	-	-	-	-
PC4. ensure that the selected tools are in good working condition	-	-	-	-
<i>Identify appropriate site for preparing vermicompost</i>	5	10	-	5
PC5. select suitable location based on factors such as accessibility to road; availability of bio-wastes; good ventilation; etc.	-	-	-	-
PC6. ensure that the selected site is located close to dairy farms or places with high population of cattle to procure cow dung and farm wastes	-	-	-	-
PC7. verify that water resource is available in the vicinity of the vermicomposting area	-	-	-	-
PC8. ensure the availability of farm labour in the selected location	-	-	-	-
PC9. select appropriate vermicomposting method based on various factors	-	-	-	-
<i>Construct vermicompost unit</i>	5	10	-	5
PC10. obtain appropriate tools, accessories and construction raw materials as per the selected vermicomposting method	-	-	-	-
PC11. identify shady area in the selected site to construct the vermicompost unit as per the approved procedures	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. provide correct, safe and accurate instructions to workers for any construction work and follow the same where contributing to construction	-	-	-	-
<i>Prepare bed for vermicomposting</i>	10	10	-	10
PC13. select the appropriate kind of raw materials to make vermibed as per resource availability and feasibility, viz. straws, waste paper, saw dusts, corrugated cardboard, dry leaves, corn stalks, etc.	-	-	-	-
PC14. ensure that the bottom of the vermicomposting unit is covered with appropriate materials such as layer of tiles, broken bricks, coarse loamy soil, coconut husk or polythene sheet, etc.	-	-	-	-
PC15. prepare vermibed of appropriate height/level using suitable raw materials as per approved vermicomposting practices	-	-	-	-
PC16. select appropriate type of organic wastes (free from non-biodegradable materials) required to be used for making vermicomposting heap as per standard requirements	-	-	-	-
PC17. identify reliable source(s) to ensure continuous supply of food material/organic waste required as feeds for vermes/earthworm	-	-	-	-
PC18. verify that organic wastes are shredded into small pieces prior to mixing in accordance with good vermicomposting practices	-	-	-	-
PC19. ensure that the mixture is transferred into the vermicomposting unit following approved procedures or as alternating layers of shredded organic wastes and cow dung slurry in correct proportion	-	-	-	-
PC20. ensure that the layer or height of the heap is maintained as per standard quality requirements	-	-	-	-
<i>Post vermibed preparation activities</i>	5	5	-	5

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC21. check that the top layer of the vermicomposting unit is properly covered with soil, cow dung, leaves, straws or other crop wastes as per good vermicomposting practices	-	-	-	-
PC22. ensure that the mixture or heap is allowed to decompose in the vermibed for required length of days depending on the vermicomposting method selected	-	-	-	-
PC23. check that appropriate moisture level is maintained during the process in line with standard procedure requirements	-	-	-	-
PC24. optimize usage of material including water in various tasks/activities/processes	-	-	-	-
PC25. segregate waste into different categories	-	-	-	-
PC26. dispose non-recyclable waste appropriately	-	-	-	-
PC27. deposit recyclable and reusable material at identified location	-	-	-	-
PC28. leave the work area in a safe condition in line with environmental health and safety	-	-	-	-
NOS Total	30	40	-	30

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National Occupational Standards (NOS) Parameters

NOS Code	AGR/N1232
NOS Name	Identify appropriate site and prepare bed for vermicompost
Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Farm Management
NSQF Level	2
Credits	2
Version	1.0
Last Reviewed Date	29/09/2023
Next Review Date	29/09/2026
NSQC Clearance Date	29/09/2023

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AGR/N1233: Inoculate earthworms in prepared unit and manage the vermicompost process

Description

This unit deals with the selection of appropriate inoculation techniques with correct type of earthworms, preparation of feed, protection from potential predators of worms and good vermicomposting practices

Scope

The scope covers the following :

- Prepare to inoculate earthworms
- Inoculate earthworms into vermicomposting unit
- Prepare feed and manage vermicomposting unit
- Control predator attacks

Elements and Performance Criteria

Prepare to inoculate earthworms

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

- PC1.** identify reliable source for procuring earthworm species for vermicomposting considering approved vermicomposting practices while selecting earthworm species
- PC2.** select the correct types of earthworm to carry out composting types: eisenia fetida and eudrilus eugeniae (exotic), perionyx excavates and lampito mauritii (indigenous)
- PC3.** ensure that the quantity of earthworms selected is appropriate and proportionate to the size of the vermibed
- PC4.** establish the favorable thriving conditions prior to releasing earthworms into the bed
- PC5.** verify that the organic wastes have undergone required state of decomposition prior to introducing the earthworms

Inoculate earthworms into vermicomposting unit

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

- PC6.** check that the selected earthworms are uniformly released over the decomposed materials as per required quality standards
- PC7.** ensure that the moisture level is maintained as per standard vermicomposting practices
- PC8.** verify that the decomposed matter is loosened enough to allow air to pass through
- PC9.** ensure that the heap is properly covered with appropriate material such as leaves, barks, bamboos, dried crop wastes, etc.
- PC10.** protect the vermicomposting unit against adverse weather conditions, such as rains, winds, heat, etc.
- PC11.** ensure that the earthworms are allowed to feed on the decomposed materials for required period of time as per the standard vermicomposting procedure

Prepare feed and manage vermicomposting unit

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

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- PC12.** collect required organic wastes and cow dung to make heap for vermicomposting in accordance with good vermicomposting practices
- PC13.** confirm that the collected raw materials are in correct ratio as per given vermicomposting requirements
- PC14.** verify that the cattle dung is properly dried in sunlight or allowed to cool for specified length of time prior to using it
- PC15.** prepare the feed separately for transferring earthworms post harvesting
- PC16.** ensure that the heap is allowed to decompose for required period of time
- PC17.** sprinkle water over the heap in every 2-3 days to ensure that the temperature does not increase above the required level
- PC18.** drain the excess water from the unit through appropriately constructed channels
- PC19.** collect the nutrients rich excess water/vermiwash in containers for further utilization
- PC20.** use approved procedures to aerate the decomposed material with respect to the type of vermicomposting selected

Control predator attacks

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

- PC21.** ensure that the vermibed is properly covered with appropriate materials such as wire mesh, gunny bag, etc. to prevent birds from picking the earthworms
- PC22.** comply with relevant agricultural practices to protect earthworms from some animals and insects such as red mites, ants, flatworm, centipedes, rats, etc
- PC23.** treat vermibed with insecticide in appropriate amount at the time of filling to prevent attacks by predators
- PC24.** establish favorable environmental conditions during the vermicomposting process against diseases such as 'sour crop'
- PC25.** leave the work area in a safe condition and in accordance with the environmental health and safety

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.** impact of not following the health, hygiene, safety and quality standards on consumers and the business
- KU5.** importance of using personal protective equipment appropriate to work
- KU6.** range of tools and materials used in inoculation of earthworms and management of feeds and protection from preys
- KU7.** how to identify reliable sources for procuring earthworms
- KU8.** different types of earthworms used in vermicomposting
- KU9.** cost of earthworms and how to determine quantitative requirements
- KU10.** species of earthworms yielding high quality vermicompost

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- KU11.** advantages of vermicompost over other kinds of composts
- KU12.** importance of vermiwash and its uses
- KU13.** benefits of using vermicompost and vermiwash in improving the soil properties
- KU14.** favorable thriving conditions for earthworms
- KU15.** how to maintain favourable thriving conditions for earthworms
- KU16.** appropriate techniques used for inoculation of earthworms
- KU17.** feed management and watering methods
- KU18.** importance of maintaining temperature control of vermicompost unit/heap
- KU19.** different types of predators known to prey on earthworms and how to control attacks
- KU20.** appropriate use of fungicide and insecticide to control intrusions/attacks

Generic Skills (GS)

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

- GS1.** note down the expenses incurred during maintenance of unit and procurement of earthworms in English or local language
- GS2.** document work related activities in appropriate work-sheet, tracker, register, etc.
- GS3.** read warnings/instructions given on tools and materials such as fungicide or insecticide in English or local language
- GS4.** communicate effectively with sub-ordinates/co-workers
- GS5.** plan and organize work in such a way that all activities are completed in time and as per required specifications
- GS6.** prioritize and plan for problem solving
- GS7.** apply logical reasoning to solve problems or any potential problems related to work

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Prepare to inoculate earthworms</i>	10	5	-	10
PC1. identify reliable source for procuring earthworm species for vermicomposting considering approved vermicomposting practices while selecting earthworm species	-	-	-	-
PC2. select the correct types of earthworm to carry out composting types: eisenia fetida and eudrilus eugeniae (exotic), perionyx excavates and lampito mauritii (indigenous)	-	-	-	-
PC3. ensure that the quantity of earthworms selected is appropriate and proportionate to the size of the vermibed	-	-	-	-
PC4. establish the favorable thriving conditions prior to releasing earthworms into the bed	-	-	-	-
PC5. verify that the organic wastes have undergone required state of decomposition prior to introducing the earthworms	-	-	-	-
<i>Inoculate earthworms into vermicomposting unit</i>	5	10	-	10
PC6. check that the selected earthworms are uniformly released over the decomposed materials as per required quality standards	-	-	-	-
PC7. ensure that the moisture level is maintained as per standard vermicomposting practices	-	-	-	-
PC8. verify that the decomposed matter is loosened enough to allow air to pass through	-	-	-	-
PC9. ensure that the heap is properly covered with appropriate material such as leaves, barks, bamboos, dried crop wastes, etc.	-	-	-	-
PC10. protect the vermicomposting unit against adverse weather conditions, such as rains, winds, heat, etc.	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. ensure that the earthworms are allowed to feed on the decomposed materials for required period of time as per the standard vermicomposting procedure	-	-	-	-
<i>Prepare feed and manage vermicomposting unit</i>	5	10	-	10
PC12. collect required organic wastes and cow dung to make heap for vermicomposting in accordance with good vermicomposting practices	-	-	-	-
PC13. confirm that the collected raw materials are in correct ratio as per given vermicomposting requirements	-	-	-	-
PC14. verify that the cattle dung is properly dried in sunlight or allowed to cool for specified length of time prior to using it	-	-	-	-
PC15. prepare the feed separately for transferring earthworms post harvesting	-	-	-	-
PC16. ensure that the heap is allowed to decompose for required period of time	-	-	-	-
PC17. sprinkle water over the heap in every 2-3 days to ensure that the temperature does not increase above the required level	-	-	-	-
PC18. drain the excess water from the unit through appropriately constructed channels	-	-	-	-
PC19. collect the nutrients rich excess water/vermiwash in containers for further utilization	-	-	-	-
PC20. use approved procedures to aerate the decomposed material with respect to the type of vermicomposting selected	-	-	-	-
<i>Control predator attacks</i>	10	10	-	5
PC21. ensure that the vermibed is properly covered with appropriate materials such as wire mesh, gunny bag, etc. to prevent birds from picking the earthworms	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC22. comply with relevant agricultural practices to protect earthworms from some animals and insects such as red mites, ants, flatworm, centipedes, rats, etc	-	-	-	-
PC23. treat vermibed with insecticide in appropriate amount at the time of filling to prevent attacks by predators	-	-	-	-
PC24. establish favorable environmental conditions during the vermicomposting process against diseases such as 'sour crop'	-	-	-	-
PC25. leave the work area in a safe condition and in accordance with the environmental health and safety	-	-	-	-
NOS Total	30	35	-	35

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National Occupational Standards (NOS) Parameters

NOS Code	AGR/N1233
NOS Name	Inoculate earthworms in prepared unit and manage the vermicompost process
Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Farm Management
NSQF Level	2
Credits	2
Version	1.0
Last Reviewed Date	29/09/2023
Next Review Date	29/09/2026
NSQC Clearance Date	29/09/2023

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AGR/N1234: Harvest vermicompost using approved procedures

Description

This unit is designed to equip learners to correctly identify maturity of prepared vermicompost, carry out harvesting using approved techniques and materials, and harvesting of earthworms for reuse or sales and distribution.

Scope

The scope covers the following :

- Prepare to carry out harvesting procedures
- Harvest mature vermicompost
- Harvest earthworms
- Post-harvest procedures

Elements and Performance Criteria

Prepare to carry out harvesting procedures

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

- PC1.** use appropriate personal protective equipment suitable to the type of work
- PC2.** obtain tools and materials needed in carrying out harvesting procedures
- PC3.** ensure that the tools and accessories selected are undamaged and safe to use
- PC4.** follow the health and safety guidelines relevant to the work
- PC5.** identify the appropriate harvesting stage of compost on the basis of different quality parameters

Harvest mature vermicompost

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

- PC6.** collect the top layer manually following approved procedures and in accordance with the vermicomposting method used such as tub method, container method, etc.
- PC7.** ensure that harvesting of the worm castings are limited to layer above the earthworm's presence
- PC8.** ensure that the collected vermicompost is stored in a shady dry place in line with approved procedures
- PC9.** feed the worms with partially decomposed organic wastes (prepared in correct ratio) to continue composting cycle relevant to the type of method selected

Harvest earthworms

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

- PC10.** remove the upper layer of the stable and mature compost before harvesting the earthworms as per approved procedures
- PC11.** carry out harvesting of earthworms using technique appropriate to the type of vermicomposting method adopted
- PC12.** ensure that the vermiculture collected is segregated into cocoons, juveniles, adults, etc. as per work requirements

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Post-harvest procedures

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

- PC13.** ensure that approved post-harvesting procedures are followed
- PC14.** recycle the process by refilling the bed with partially prepared organic wastes in required quantity and ratio as per the type of vermicomposting method selected
- PC15.** ensure that the compost collected is sun dried and sieved to obtain good quality material
- PC16.** pack the compost in bags or containers made of suitable materials
- PC17.** store the bags or containers in cool and dry place
- PC18.** ensure pest control practices are followed during storing
- PC19.** leave the work place in an environmentally safe condition

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.** impact of not following the health, hygiene, safety and quality standards on consumers and the business
- KU5.** importance of using personal protective equipment appropriate to work
- KU6.** range of tools and materials used in harvesting of vermicompost and earthworms
- KU7.** how to determine maturity of vermicompost
- KU8.** different techniques used to harvest vermicompost based on the type of composting method used
- KU9.** appropriate collection and storage procedures post harvesting
- KU10.** restoration of harvested unit with adequate amount of feed for process recycle
- KU11.** methods used to harvest earthworms
- KU12.** how to segregate earthworms into cocoons, juveniles & adults and determine their uses
- KU13.** sale and distribution of extra earthworms
- KU14.** procedures to process and pack vermicompost in appropriate materials

Generic Skills (GS)

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

- GS1.** note down the expenses incurred during harvesting of vermicompost and earthworms in English or local language
- GS2.** document work related activities in appropriate work-sheet, tracker, register, etc.
- GS3.** read warnings/instructions given on tools and materials such as packing materials in English or local language
- GS4.** communicate effectively with sub-ordinates/co-workers

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- GS5.** plan and organize work in such a way that all activities are completed in time and as per required specifications
- GS6.** assess customers needs, quality standards and deliverables that are within one's scope of work
- GS7.** provide good customer service, commit to timeline and maintain service level agreements at all times
- GS8.** prioritize and plan for problem solving
- GS9.** apply logical reasoning to solve problems or any potential problems related to work

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Prepare to carry out harvesting procedures</i>	5	5	-	5
PC1. use appropriate personal protective equipment suitable to the type of work	-	-	-	-
PC2. obtain tools and materials needed in carrying out harvesting procedures	-	-	-	-
PC3. ensure that the tools and accessories selected are undamaged and safe to use	-	-	-	-
PC4. follow the health and safety guidelines relevant to the work	-	-	-	-
PC5. identify the appropriate harvesting stage of compost on the basis of different quality parameters	-	-	-	-
<i>Harvest mature vermicompost</i>	5	10	-	10
PC6. collect the top layer manually following approved procedures and in accordance with the vermicomposting method used such as tub method, container method, etc.	-	-	-	-
PC7. ensure that harvesting of the worm castings are limited to layer above the earthworm's presence	-	-	-	-
PC8. ensure that the collected vermicompost is stored in a shady dry place in line with approved procedures	-	-	-	-
PC9. feed the worms with partially decomposed organic wastes (prepared in correct ratio) to continue composting cycle relevant to the type of method selected	-	-	-	-
<i>Harvest earthworms</i>	10	10	-	10
PC10. remove the upper layer of the stable and mature compost before harvesting the earthworms as per approved procedures	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. carry out harvesting of earthworms using technique appropriate to the type of vermicomposting method adopted	-	-	-	-
PC12. ensure that the vermiculture collected is segregated into cocoons, juveniles, adults, etc. as per work requirements	-	-	-	-
<i>Post-harvest procedures</i>	10	10	-	10
PC13. ensure that approved post-harvesting procedures are followed	-	-	-	-
PC14. recycle the process by refilling the bed with partially prepared organic wastes in required quantity and ratio as per the type of vermicomposting method selected	-	-	-	-
PC15. ensure that the compost collected is sun dried and sieved to obtain good quality material	-	-	-	-
PC16. pack the compost in bags or containers made of suitable materials	-	-	-	-
PC17. store the bags or containers in cool and dry place	-	-	-	-
PC18. ensure pest control practices are followed during storing	-	-	-	-
PC19. leave the work place in an environmentally safe condition	-	-	-	-
NOS Total	30	35	-	35

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	AGR/N1234
NOS Name	Harvest vermicompost using approved procedures
Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Farm Management
NSQF Level	2
Credits	2
Version	1.0
Last Reviewed Date	29/09/2023
Next Review Date	29/09/2026
NSQC Clearance Date	29/09/2023

Qualification Pack

DGT/VSQ/N0101: Employability Skills (30 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
- 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. understand the significance of employability skills in meeting the job requirements

Constitutional values – Citizenship

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

PC2. identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices

Becoming a Professional in the 21st Century

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

PC3. explain 21st Century Skills such as Self-Awareness, Behavior Skills, Positive attitude, self-motivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset etc.

Basic English Skills

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

PC4. speak with others using some basic English phrases or sentences

Communication Skills

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

PC5. follow good manners while communicating with others

PC6. work with others in a team

Qualification Pack

Diversity & Inclusion

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

PC7. communicate and behave appropriately with all genders and PwD

PC8. report any issues related to sexual harassment

Financial and Legal Literacy

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

PC9. use various financial products and services safely and securely

PC10. calculate income, expenses, savings etc.

PC11. approach the concerned authorities for any exploitation as per legal rights and laws

Essential Digital Skills

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

PC12. operate digital devices and use its features and applications securely and safely

PC13. use internet and social media platforms securely and safely

Entrepreneurship

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

PC14. identify and assess opportunities for potential business

PC15. identify sources for arranging money and associated financial and legal challenges

Customer Service

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

PC16. identify different types of customers

PC17. identify customer needs and address them appropriately

PC18. follow appropriate hygiene and grooming standards

Getting ready for apprenticeship & Jobs

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

PC19. create a basic biodata

PC20. search for suitable jobs and apply

PC21. identify and register apprenticeship opportunities as per requirement

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. need for employability skills

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 basic spoken English language

KU6. Do and dont of effective communication

KU7. inclusivity and its importance

KU8. different types of disabilities and appropriate communication and behaviour towards PwD

KU9. different types of financial products and services

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- KU10.** how to compute income and expenses
- KU11.** importance of maintaining safety and security in financial transactions
- KU12.** different legal rights and laws
- KU13.** how to operate digital devices and applications safely and securely
- KU14.** ways to identify business opportunities
- KU15.** types of customers and their needs
- KU16.** how to apply for a job and prepare for an interview
- KU17.** apprenticeship scheme and the process of registering on apprenticeship portal

Generic Skills (GS)

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

- GS1.** communicate effectively using appropriate language
- GS2.** behave politely and appropriately with all
- GS3.** perform basic calculations
- GS4.** solve problems effectively
- GS5.** be careful and attentive at work
- GS6.** use time effectively
- GS7.** maintain hygiene and sanitisation 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>	1	1	-	-
PC1. understand the significance of employability skills in meeting the job requirements	-	-	-	-
<i>Constitutional values – Citizenship</i>	1	1	-	-
PC2. identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices	-	-	-	-
<i>Becoming a Professional in the 21st Century</i>	1	3	-	-
PC3. explain 21st Century Skills such as Self-Awareness, Behavior Skills, Positive attitude, self-motivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset etc.	-	-	-	-
<i>Basic English Skills</i>	2	3	-	-
PC4. speak with others using some basic English phrases or sentences	-	-	-	-
<i>Communication Skills</i>	1	1	-	-
PC5. follow good manners while communicating with others	-	-	-	-
PC6. work with others in a team	-	-	-	-
<i>Diversity & Inclusion</i>	1	1	-	-
PC7. communicate and behave appropriately with all genders and PwD	-	-	-	-
PC8. report any issues related to sexual harassment	-	-	-	-
<i>Financial and Legal Literacy</i>	3	4	-	-
PC9. use various financial products and services safely and securely	-	-	-	-

Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC10. calculate income, expenses, savings etc.	-	-	-	-
PC11. approach the concerned authorities for any exploitation as per legal rights and laws	-	-	-	-
<i>Essential Digital Skills</i>	4	6	-	-
PC12. operate digital devices and use its features and applications securely and safely	-	-	-	-
PC13. use internet and social media platforms securely and safely	-	-	-	-
<i>Entrepreneurship</i>	3	5	-	-
PC14. identify and assess opportunities for potential business	-	-	-	-
PC15. identify sources for arranging money and associated financial and legal challenges	-	-	-	-
<i>Customer Service</i>	2	2	-	-
PC16. identify different types of customers	-	-	-	-
PC17. identify customer needs and address them appropriately	-	-	-	-
PC18. follow appropriate hygiene and grooming standards	-	-	-	-
<i>Getting ready for apprenticeship & Jobs</i>	1	3	-	-
PC19. create a basic biodata	-	-	-	-
PC20. search for suitable jobs and apply	-	-	-	-
PC21. identify and register apprenticeship opportunities as per requirement	-	-	-	-
NOS Total	20	30	-	-

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	DGT/VSQ/N0101
NOS Name	Employability Skills (30 Hours)
Sector	Cross Sectoral
Sub-Sector	Professional Skills
Occupation	Employability
NSQF Level	2
Credits	1
Version	1.0
Last Reviewed Date	18/02/2025
Next Review Date	18/02/2028
NSQC Clearance Date	18/02/2025

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) 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. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/optional set of NOS.
4. Individual assessment agencies will create unique question papers for the theory part for each candidate at each examination/training center (as per assessment criteria below).
5. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training center based on these criteria.
6. To pass the Qualification Pack assessment, every trainee should score a minimum of 50% of % aggregate marks to successfully clear the assessment.

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

Minimum Aggregate Passing % at QP Level : 50

(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/N1232. Identify appropriate site and prepare bed for vermicompost	30	40	-	30	100	30
AGR/N1233. Inoculate earthworms in prepared unit and manage the vermicompost process	30	35	-	35	100	35
AGR/N1234. Harvest vermicompost using approved procedures	30	35	-	35	100	30
DGT/VSQ/N0101. Employability Skills (30 Hours)	20	30	-	-	50	5
Total	110	140	-	100	350	100

Qualification Pack

Acronyms

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training
PwD	Persons with Disabilities
PPE	Personal Protective Equipment
PPE	Personal Protective Equipment
AA	Assessment Agency
AB	Awarding Body
ISCO	International Standard Classification of Occupations
NCO	National Classification of Occupations
NCrF	National Credit Framework
NQR	National Qualification Register
OJT	On the Job Training

Qualification Pack

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.