

Qualification Pack



Rice Transplanter Machine Operator Cum Mechanic

QP Code: AGR/Q1113

Version: 2.0

NSQF Level: 4

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AGR/Q1113: Rice Transplanter Machine Operator Cum Mechanic

Brief Job Description

A Rice Transplanter Machine Operator cum Mechanic is responsible for preparing and operating a rice transplanter machine to plant rice seedlings in paddy fields. The individual also carries out repair and maintenance of the rice transplanter.

Personal Attributes

The individual must be physically fit to work for long hours in paddy fields. The person must have problem-solving skills with an aptitude for machines. Ability to communicate well and co-ordinate with others are other important attributes required in this job role.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. [AGR/N1143: Prepare the rice transplanter machine for operation](#)
2. [AGR/N1144: Operate the rice transplanter machine](#)
3. [AGR/N1145: Carry out repair and maintenance of the rice transplanter machine](#)
4. [AGR/N1146: Raise rice seedlings in the nursery](#)
5. [AGR/N9903: Maintain health and safety at the workplace](#)
6. [DGT/VSQ/N0102: Employability Skills \(60 Hours\)](#)

Qualification Pack (QP) Parameters

Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Farm Machinery, Equipment Operation and Maintenance
Country	India
NSQF Level	4
Credits	13

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Aligned to NCO/ISCO/ISIC Code	NCO-2015/NIL
Minimum Educational Qualification & Experience	<p>12th grade Pass OR Completed 2nd year of the 3-year diploma after 10 (and pursuing regular diploma) OR 10th grade pass (plus 2-year NTC) OR 10th grade pass (plus 1-year NTC plus 1 year NAC) OR 8th grade pass with 2 year NTC plus 1 year NAC plus 1 year CITS (plus 1-year NTC plus 1 year NAC) OR 10th grade pass and pursuing continuous schooling OR 10th grade pass with 2 Years of experience relevant experience OR Previous relevant Qualification of NSQF Level (Level 3.0 with minimum education as 8th Grade pass) with 3 Years of experience relevant experience OR Previous relevant Qualification of NSQF Level (Level 3.5 with 1.5- year relevant experience)</p>
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	25/11/2024
NSQC Approval Date	25/11/2021
Version	2.0
Reference code on NQR	QG-04-AG-00294-2023-V1.1-ASCI
NQR Version	1.1

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AGR/N1143: Prepare the rice transplanter machine for operation

Description

This OS unit is about performing daily checks on a rice transplanter machine and preparing it for operation.

Scope

The scope covers the following :

- Perform daily checks
- Apply the necessary adjustments

Elements and Performance Criteria

Perform daily checks

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

- PC1.** check the beaks and apron/ beaks and R-forks/ centre and side floats for the prescribed gap and free movement
- PC2.** check the v-belt and 128-link chain for the prescribed level of tension
- PC3.** check the gear lever/ clutch lever/ planting lever and hydraulic machinery for free movement and correct engagement/ disengagement
- PC4.** check the engine oil, transmission oil and fuel for the prescribed level
- PC5.** examine the fan cover for clogging
- PC6.** check all the nuts and bolts are secured tightly
- PC7.** check that seedling tray, guards and all moving parts are installed and positioned correctly
- PC8.** test the headlight for expected functioning
- PC9.** examine the tyre and wheels for any wear and tear or damage
- PC10.** clean the air filters as per the SOP
- PC11.** apply grease on the machine surface and greasing points

Apply the necessary adjustment

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

- PC12.** adjust the centre and side floats according to the field conditions
- PC13.** set the marker in the correct position as per the operator's manual
- PC14.** modify various operational settings for optimum performance such as lateral feed amount, planting speed, spacing and depth, etc.
- PC15.** maintain the record of pre-start checks

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** applicable documentation and record-keeping requirements in the job role

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- KU2.** the recommended gap between beaks and apron/ beaks and R-Forks/ centre and side floats in the rice transplanter
- KU3.** how to set lateral feed amount, planting speed, spacing and depth
- KU4.** importance of ensuring free movement and engagement/ disengagement of the gear lever/ clutch lever/ hydraulic machinery
- KU5.** prescribed levels for the engine oil, transmission oil and fuel
- KU6.** how to position the seedling tray, guards and all other moving parts of the rice transplanter
- KU7.** importance of applying grease on the machine surface and greasing points

Generic Skills (GS)

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

- GS1.** prepare work-related notes and records
- GS2.** listen attentively to understand the information/ instructions being given
- GS3.** communicate politely and professionally
- GS4.** read the relevant literature to get latest updates about the field of work
- GS5.** identify possible disruptions to work and take preventive measures
- GS6.** take quick decision to deal with any emergencies/ accidents
- GS7.** plan and prioritise tasks to ensure timely completion
- GS8.** co-ordinate with co-workers to achieve work objectives

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Perform daily checks</i>	15	20	-	14
PC1. check the beaks and apron/ beaks and R-forks/ centre and side floats for the prescribed gap and free movement	-	-	-	-
PC2. check the v-belt and 128-link chain for the prescribed level of tension	-	-	-	-
PC3. check the gear lever/ clutch lever/ planting lever and hydraulic machinery for free movement and correct engagement/ disengagement	-	-	-	-
PC4. check the engine oil, transmission oil and fuel for the prescribed level	-	-	-	-
PC5. examine the fan cover for clogging	-	-	-	-
PC6. check all the nuts and bolts are secured tightly	-	-	-	-
PC7. check that seedling tray, guards and all moving parts are installed and positioned correctly	-	-	-	-
PC8. test the headlight for expected functioning	-	-	-	-
PC9. examine the tyre and wheels for any wear and tear or damage	-	-	-	-
PC10. clean the air filters as per the SOP	-	-	-	-
PC11. apply grease on the machine surface and greasing points	-	-	-	-
<i>Apply the necessary adjustment</i>	15	20	-	16
PC12. adjust the centre and side floats according to the field conditions	-	-	-	-
PC13. set the marker in the correct position as per the operator's manual	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC14. modify various operational settings for optimum performance such as lateral feed amount, planting speed, spacing and depth, etc.	-	-	-	-
PC15. maintain the record of pre-start checks	-	-	-	-
NOS Total	30	40	-	30

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National Occupational Standards (NOS) Parameters

NOS Code	AGR/N1143
NOS Name	Prepare the rice transplanter machine for operation
Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Farm Machinery, Equipment Operation and Maintenance
NSQF Level	4
Credits	2
Version	1.0
Last Reviewed Date	25/11/2021
Next Review Date	25/11/2024
NSQC Clearance Date	25/11/2021

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AGR/N1144: Operate the rice transplanter machine

Description

This OS unit is about operating a rice transplanter machine to transplant rice seedlings in a paddy farm.

Scope

The scope covers the following :

- Check the condition of paddy farm and seedlings
- Operate the rice transplanter
- Undertake safety measures during machine operation

Elements and Performance Criteria

Check the condition of paddy farm and seedlings

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

- PC1.** check the wetness of the soil, quality of puddling and surface levelling at the paddy farm for their suitability to operate the rice transplanter
- PC2.** check that rice seedlings and their roots are damage-free and healthy with the prescribed level of moisture

Operate the rice transplanter

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

- PC3.** operate the rice transplanter machine at a speed suitable to the seedlings and field conditions while avoiding a sudden change of direction
- PC4.** use the gear lever/ clutch lever/ planting lever/ hydraulic system as per the operator's manual
- PC5.** transplant the rice seedling in the recommended pattern to achieve machine efficiency
- PC6.** use the rice transplanter machine according to its recommended capacity
- PC7.** use the appropriate Personal Protective Equipment (PPE) during the machine operation
- PC8.** maintain the record of rice transplanter operation

Undertake safety measures during machine operation

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

- PC9.** ensure that all the guards are placed firmly before operating the rice transplanter machine
- PC10.** maintain a safe distance from the rice transplanter's moving parts during operation
- PC11.** ensure that nobody comes near the operational rice transplanter
- PC12.** park the rice transplanter on a flat surface for any inspection, repair and maintenance during operation
- PC13.** carry out any repair, maintenance and adjustments after shutting down the rice transplanter
- PC14.** clean all straw and flammable waste near the engine and fuel tank to reduce the fire hazard

Knowledge and Understanding (KU)

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The individual on the job needs to know and understand:

- KU1.** various parameters to be assessed before operating a rice transplanter such as surface levelling, the wetness of the soil, quality of puddling and seedlings
- KU2.** effective use of gear lever/ clutch lever/ planting lever/ hydraulic system to achieve machine-efficiency
- KU3.** various measures to ensure personal safety and reduce fire and other hazards while operating a rice transplanter such as using the relevant PPE
- KU4.** the correct process to shut down the rice transplanter and the recommended rundown time before making any adjustments or carrying out repair/ maintenance during operation
- KU5.** appropriate speed to operate the rice transplanter
- KU6.** importance of using the rice transplanter machine according to its recommended capacity
- KU7.** common problems encountered during the operation of a rice transplanter and their troubleshooting

Generic Skills (GS)

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

- GS1.** communicate politely and professionally
- GS2.** listen attentively to understand the information/ instructions being given
- GS3.** read the relevant literature, guides and manuals
- GS4.** prepare work-related records and notes
- GS5.** plan and prioritise tasks to ensure timely completion
- GS6.** take decisions in the best interest of customers and business
- GS7.** identify possible disruptions to work and take preventive measures
- GS8.** co-ordinate with co-workers to achieve work objectives

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Check the condition of paddy farm and seedlings</i>	10	15	-	10
PC1. check the wetness of the soil, quality of puddling and surface levelling at the paddy farm for their suitability to operate the rice transplanter	-	-	-	-
PC2. check that rice seedlings and their roots are damage-free and healthy with the prescribed level of moisture	-	-	-	-
<i>Operate the rice transplanter</i>	10	15	-	10
PC3. operate the rice transplanter machine at a speed suitable to the seedlings and field conditions while avoiding a sudden change of direction	-	-	-	-
PC4. use the gear lever/ clutch lever/ planting lever/ hydraulic system as per the operator's manual	-	-	-	-
PC5. transplant the rice seedling in the recommended pattern to achieve machine efficiency	-	-	-	-
PC6. use the rice transplanter machine according to its recommended capacity	-	-	-	-
PC7. use the appropriate Personal Protective Equipment (PPE) during the machine operation	-	-	-	-
PC8. maintain the record of rice transplanter operation	-	-	-	-
<i>Undertake safety measures during machine operation</i>	10	10	-	10
PC9. ensure that all the guards are placed firmly before operating the rice transplanter machine	-	-	-	-
PC10. maintain a safe distance from the rice transplanter's moving parts during operation	-	-	-	-
PC11. ensure that nobody comes near the operational rice transplanter	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. park the rice transplanter on a flat surface for any inspection, repair and maintenance during operation	-	-	-	-
PC13. carry out any repair, maintenance and adjustments after shutting down the rice transplanter	-	-	-	-
PC14. clean all straw and flammable waste near the engine and fuel tank to reduce the fire hazard	-	-	-	-
NOS Total	30	40	-	30

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National Occupational Standards (NOS) Parameters

NOS Code	AGR/N1144
NOS Name	Operate the rice transplanter machine
Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Farm Machinery, Equipment Operation and Maintenance
NSQF Level	4
Credits	2
Version	1.0
Last Reviewed Date	25/11/2021
Next Review Date	25/11/2024
NSQC Clearance Date	25/11/2021

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AGR/N1145: Carry out repair and maintenance of the rice transplanter machine

Description

This OS unit is about carrying out regular repair and maintenance of a rice transplanter machine.

Scope

The scope covers the following :

- Examine the machine parts
- Carry out repair and maintenance
- Optimise resource utilisation
- Perform waste management

Elements and Performance Criteria

Examine the machine parts

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

- PC1.** station the rice transplanter machine at a safe place
- PC2.** switch off the engine and allow it to cool down
- PC3.** detach the removable parts as per the manufacturer's instructions
- PC4.** check the beaks/ R-forks/ shooters/ planter case/ centre and side floats/ feeder belt/ tyres/ wheels/ hydraulic cylinder/ sliding tray for wear and tear or damage
- PC5.** examine the chain-case and sub-assembly/ clutch lever wire/ hydraulic control wire/ accelerator wire/ gear control wire for bends
- PC6.** examine the engine, hydraulic hoses and pump for leakage
- PC7.** check the engine oil, transmission oil, chain-case oil, drive case oil, planter arm oil for the prescribed levels

Carry out repair and maintenance

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

- PC8.** remove dust, waste straw, crop stems, and mud from the machine and its parts using the manufacturer-approved cleaning methods and chemicals
- PC9.** tighten the nuts and bolts, hydraulic hoses, pump and its fittings
- PC10.** apply the recommended grade of grease/ lubricant on the nuts and bolts, chains and other greasing points
- PC11.** set the gear lever/ clutch lever/ planting lever/ hydraulic machinery/ beaks/ R-forks/ shooters in the correct position
- PC12.** adjust the tension of v-belt, 128-link chain and other chains to the prescribed level
- PC13.** refill the engine oil, transmission oil, chain-case oil, drive case oil, planter arm oil as per the requirement

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- PC14.** replace the air cleaner/ clutch lever wire/ gear control wire/ hydraulic control wires/ accelerator wires/ v-belt/ chains/ beaks/ R-forks/ shooters/ centre and side floats as per the manufacturer's instructions
- PC15.** maintain the record of repair and maintenance activities
- PC16.** schedule the next maintenance as per the maintenance schedule

Optimise resource utilisation

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

- PC17.** optimise the usage of various material in different tasks/ activities/ processes
- PC18.** optimise the usage of water/ electricity/ energy in various tasks/ activities/ processes
- PC19.** connect electrical tools and equipment safely and turn off when not in use

Perform waste management

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

- PC20.** segregate waste into different categories
- PC21.** dispose non-recyclable waste appropriately
- PC22.** deposit recyclable and reusable material at the identified location

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** correct procedure of detaching and cleaning various rice transplanter machine parts
- KU2.** approved cleaning methods and chemicals to be used on a rice transplanter
- KU3.** the recommended engine oil, transmission oil, chain-case oil, drive case oil, planter arm oil levels to be maintained in the rice transplanter
- KU4.** repair and maintenance needs of various rice transplanter machine parts such as beaks/ R-forks/ shooters/ planter case/ centre and side floats/ feeder belt/ tyres/ wheels/ hydraulic cylinder/ sliding tray/ chain-case and sub-assembly/ clutch lever wire/ hydraulic control wire/ accelerator wire/ gear control wire/ hydraulic hoses and pump
- KU5.** recommended grade of grease/ lubricant to use on rice transplanter machine surface, nuts and bolts
- KU6.** the correct position for the gear lever/ clutch lever/ planting lever/ hydraulic machinery/ beaks, R-forks and shooters
- KU7.** the correct process of replacing the air cleaner/ clutch lever wire/ gear control wire/ hydraulic control wires/ accelerator wires/ v-belt/ chains/ beaks/ R-forks/ shooters/ centre and side floats
- KU8.** the appropriate maintenance schedule for a rice transplanter machine
- KU9.** importance of following environmental and ecological best practice to minimise the impact on the environment
- KU10.** benefits of resource optimisation
- KU11.** ways of efficiently managing various materials in repair and maintenance activities
- KU12.** common practices of conserving electricity
- KU13.** methods of recycling and disposing different types of waste
- KU14.** common sources of pollution and ways to minimise it

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Generic Skills (GS)

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

- GS1.** plan and prioritise tasks to ensure timely completion
- GS2.** co-ordinate with co-workers to achieve work objectives
- GS3.** listen attentively to understand the information/ instructions being given
- GS4.** identify possible disruptions to work and take preventive measures
- GS5.** take quick decision to deal with any emergencies/ accidents
- GS6.** prepare work-related notes and records
- GS7.** communicate politely and professionally
- GS8.** read the relevant literature to get latest updates about the field of work

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Examine the machine parts</i>	5	10	-	5
PC1. station the rice transplanter machine at a safe place	-	-	-	-
PC2. switch off the engine and allow it to cool down	-	-	-	-
PC3. detach the removable parts as per the manufacturer's instructions	-	-	-	-
PC4. check the beaks/ R-forks/ shooters/ planter case/ centre and side floats/ feeder belt/ tyres/ wheels/ hydraulic cylinder/ sliding tray for wear and tear or damage	-	-	-	-
PC5. examine the chain-case and sub-assembly/ clutch lever wire/ hydraulic control wire/ accelerator wire/ gear control wire for bends	-	-	-	-
PC6. examine the engine, hydraulic hoses and pump for leakage	-	-	-	-
PC7. check the engine oil, transmission oil, chain-case oil, drive case oil, planter arm oil for the prescribed levels	-	-	-	-
<i>Carry out repair and maintenance</i>	10	10	-	10
PC8. remove dust, waste straw, crop stems, and mud from the machine and its parts using the manufacturer-approved cleaning methods and chemicals	-	-	-	-
PC9. tighten the nuts and bolts, hydraulic hoses, pump and its fittings	-	-	-	-
PC10. apply the recommended grade of grease/ lubricant on the nuts and bolts, chains and other greasing points	-	-	-	-
PC11. set the gear lever/ clutch lever/ planting lever/ hydraulic machinery/ beaks/ R-forks/ shooters in the correct position	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. adjust the tension of v-belt, 128-link chain and other chains to the prescribed level	-	-	-	-
PC13. refill the engine oil, transmission oil, chain-case oil, drive case oil, planter arm oil as per the requirement	-	-	-	-
PC14. replace the air cleaner/ clutch lever wire/ gear control wire/ hydraulic control wires/ accelerator wires/ v-belt/ chains/ beaks/ R-forks/ shooters/ centre and side floats as per the manufacturer's instructions	-	-	-	-
PC15. maintain the record of repair and maintenance activities	-	-	-	-
PC16. schedule the next maintenance as per the maintenance schedule	-	-	-	-
<i>Optimise resource utilisation</i>	10	10	-	10
PC17. optimise the usage of various material in different tasks/ activities/ processes	-	-	-	-
PC18. optimise the usage of water/ electricity/ energy in various tasks/ activities/ processes	-	-	-	-
PC19. connect electrical tools and equipment safely and turn off when not in use	-	-	-	-
<i>Perform waste management</i>	5	10	-	5
PC20. segregate waste into different categories	-	-	-	-
PC21. dispose non-recyclable waste appropriately	-	-	-	-
PC22. deposit recyclable and reusable material at the identified location	-	-	-	-
NOS Total	30	40	-	30

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National Occupational Standards (NOS) Parameters

NOS Code	AGR/N1145
NOS Name	Carry out repair and maintenance of the rice transplanter machine
Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Farm Machinery, Equipment Operation and Maintenance
NSQF Level	4
Credits	2
Version	1.0
Last Reviewed Date	25/11/2021
Next Review Date	25/11/2024
NSQC Clearance Date	25/11/2021

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AGR/N1146: Raise rice seedlings in the nursery

Description

This OS unit is about raising rice seedlings in different types of nurseries for being transplanted in the paddy field.

Scope

The scope covers the following :

- Raise rice seedlings in the mat-type wet method nursery
- Raise rice seedlings in the mat-type dry method nursery
- Raise rice seedlings in the tray-type dry method nursery
- Maintain, harvest and store the rice seedlings

Elements and Performance Criteria

Raise rice seedlings in the mat-type wet method nursery

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

- PC1.** select an appropriate field for the mat-type wet method nursery with the required dimensions
- PC2.** ensure the field is level without waterlogging problems and has proximity to a source of quality water for irrigation purposes
- PC3.** carry out levelling in the field after irrigating it with the recommended quantity of water
- PC4.** prepare puddled and raised seedbed of the recommended dimensions
- PC5.** prepare the soil mixture using recommended quantity of soil, well-decomposed pressmud/ bio-gas slurry/ Farm Yard Manure (FYM), rice hull, powdered di-ammonium phosphate, and appropriate fertilisers
- PC6.** apply a cover of banana leaves with the mid-rib removed/ polyethylene sheets on the soil surface to prevent seedling roots from penetrating the bottom soil layer
- PC7.** set up sliced banana bracts or other appropriate material on the sides of the seedbed to prevent the soil and seeds from being washed away
- PC8.** set up the wooden or metallic frame of recommended dimensions and place it appropriately above the polyethylene sheet for preparing nursery cakes
- PC9.** fill in the recommended quantity of soil from the surrounding field, into the frame and level it, as required
- PC10.** pre-germinate the rice seeds following the appropriate seed soaking method
- PC11.** sow the recommended quantity of pre-germinated/ sprouted seeds on the seedbed, maintaining the recommended planting density
- PC12.** cover the seedbed with the recommended quantity of dry soil or rice straw or gunny bags/ net to protect the seedlings from birds, ensuring the soil or rice straw is disease and insect free
- PC13.** water the seedbed with the recommended quantity immediately after sowing

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- PC14.** remove the dry soil/ rice straw after the recommended period when seedlings germinate and attain the appropriate growth not to be eaten by birds
- PC15.** carry out regular irrigation of the seedbed appropriately as per the recommended irrigation schedule, maintaining the recommended water level
- PC16.** tap the seedlings lightly as recommended to ensure the rice seeds come in contact with the base of the seedbed

Raise rice seedlings in the mat-type dry method nursery

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

- PC17.** select an appropriate field for a dry nursery with the required dimensions
- PC18.** ensure the field has loamy soil with an effective drainage capacity
- PC19.** check the field has recommended exposure to sunlight along with access to a reliable supply of quality water
- PC20.** carry out ploughing in the field as recommended to achieve fine tilth
- PC21.** carry out levelling in the field and apply the recommended quantity of FYM and relevant fertilisers
- PC22.** prepare the seedbed of recommended dimensions and ground surface for appropriate levelling
- PC23.** apply a cover of plastic sheet on the levelled surface
- PC24.** prepare a mixture of sieved soil and vermicompost, ensuring it is free from stones and debris
- PC25.** set up a frame using square pipes of the recommended size
- PC26.** fill in and spread the sieved soil mixture in the frame
- PC27.** level the soil mixture as per the height of the frame, ensuring the seedbed has the recommended height
- PC28.** water the soil in the seedbed through sprinkling with the recommended quantity
- PC29.** sow the recommended quantity of sprouted rice seeds in the nursery bed, using a manual seeder or through manual broadcasting, maintaining the recommended planting density
- PC30.** cover the planted seeds with the mixture of sand and finely powdered FYM
- PC31.** remove the frame appropriately after the recommended period, ensuring the nursery cake is formed, as required
- PC32.** remove any extra soil mixture from the corners of the nursery cake
- PC33.** cover the bed with straw and drench it with the recommended quantity of water, and remove the straw when seeds germinate
- PC34.** maintain the recommended water level in the seedbed

Raise rice seedlings in the tray-type dry method nursery

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

- PC35.** select an appropriate field for a tray-type dry method nursery with the required dimensions, ensuring adequate space for placing trays in the field
- PC36.** ensure the field is level without waterlogging problems and has proximity to a source of quality water for irrigation purposes
- PC37.** carry out ploughing and level the field, as required
- PC38.** prepare a raised seedbed of the recommended dimensions, creating nursery bed ground and channels
- PC39.** ensure the nursery bed has adequate space for placing seed trays

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- PC40.** use an appropriate number of plastic trays for nursery operations as per the requirement
- PC41.** prepare a mixture of sieved soil and vermicompost and fill the plastic trays with it manually or using the automatic soil filling machine
- PC42.** water the soil mixture in the trays through sprinkling
- PC43.** spread seeds on plastic tray manually or using the seeder machine, maintaining the recommended density
- PC44.** apply a cover of topsoil on trays and sprinkle dry soil/media on the seeds in the recommended quantity
- PC45.** carry the trays to the field and place the trays on the nursery bed
- PC46.** use black net/ paddy straw to protect sprouted seeds from direct sunlight and heavy rain
- PC47.** maintain water in the channel below or up to the tray surface, as appropriate, along with appropriate water levels in the field soil
- PC48.** remove black net after the recommended period when seeds germinate

Maintain, harvest and store the rice seedlings

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

- PC49.** apply the recommended organic/ inorganic fertilisers to the rice seedlings in the recommended quantity for their healthy growth
- PC50.** identify the signs of pest and disease infestation in the rice seedlings
- PC51.** apply the recommended insecticides/ pesticides to the rice seedlings in the prescribed quantity to protect them from pests and insects
- PC52.** maintain the rice seedlings for the recommended duration in the nursery bed
- PC53.** identify the signs of maturity of rice seedlings and harvest them using the appropriate tools and equipment
- PC54.** apply the recommended pesticides/ insecticides in the storage area to remove pests/ insects before storing the harvested rice seedlings
- PC55.** store the harvested rice seedlings at the recommended temperature and humidity

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the required field dimensions for setting up a wet nursery for raising rice seedlings
- KU2.** the sunlight exposure and water requirements for a wet nursery
- KU3.** the process of carrying out dry ploughing in the field
- KU4.** the importance of irrigating the ploughed field with the recommended quantity of water and maintaining it in wet condition for the recommended period
- KU5.** the process of carrying out puddling for rice seedling cultivation
- KU6.** the importance and need of applying basal manure or other recommended fertilisers to the field after puddling
- KU7.** the process of carrying out levelling in a wet field
- KU8.** how to prepare different types of nursery beds for raising rice seedlings
- KU9.** appropriate irrigation systems for rice seedling nursery cultivation
- KU10.** the importance of ensuring effective drainage in the nursery bed

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- KU11.** the process of sowing the sprouted rice seeds in the nursery bed and the recommended planting density/ seed rate to be maintained
- KU12.** the immediate care rice seedlings need after sowing
- KU13.** appropriate field dimensions required for setting up a dapog nursery
- KU14.** the importance of ensuring a level field without waterlogging problems for a dapog nursery
- KU15.** the water requirements for a dapog nursery
- KU16.** how to prepare a puddled and raised seedbed
- KU17.** how to prepare the soil mixture for a dapog nursery and the ingredients required for that
- KU18.** the importance and process of applying a cover of banana leaves with the mid-rib removed or polyethylene sheets on the soil surface
- KU19.** the importance of setting up sliced banana bracts or other appropriate material on the sides of the seedbed to prevent the soil and seeds from being washed away
- KU20.** the process of pre-germinating the rice seeds and sowing the pre-germinated seeds on the banana leaves or polyethylene sheet
- KU21.** the importance of covering the seedbed with the recommended quantity of dry soil or rice straw for an appropriate duration
- KU22.** the recommended irrigation schedule for a rice seedbed
- KU23.** the required field dimensions for setting up a dry nursery
- KU24.** the importance of using a field with loamy soil for a dry nursery
- KU25.** the sunlight exposure and water requirement for a dry nursery
- KU26.** the ploughing requirement to achieve fine tilth in the field
- KU27.** the organic/ inorganic fertilisers recommended being used on rice seedlings for their healthy growth
- KU28.** the signs of pest and disease infestation in rice seedlings
- KU29.** the recommended insecticides/ pesticides to be used to be applied to rice seedlings to prevent/ remove the relevant pests, insects and diseases
- KU30.** the appropriate duration for maintaining the rice seedlings in the nursery bed
- KU31.** the signs of maturity of rice seedlings
- KU32.** the process of harvesting the rice seedlings using the appropriate tools and equipment
- KU33.** the importance of storing the harvested rice seedlings at the recommended temperature and humidity, ensuring protection pests, rodents and disease
- KU34.** the importance of following the recommended package of practices
- KU35.** the benefit of preparing and following a checklist to ensure completion of all critical tasks
- KU36.** the importance of using quality seeds and treating seed them before use
- KU37.** the recommended Integrated Nutrient Management (INM), Integrated pest management (IPM), Irrigation management and weed management practices to be followed while raising rice seedlings
- KU38.** the importance of preparing the nursery cake of the recommended dimensions for machine planting
- KU39.** the importance of ensuring preparation of the nursery for appropriate seedling growth

Generic Skills (GS)

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

- GS1.** maintain work-related notes and records
- GS2.** read the relevant literature to get the latest updates about the field of work
- GS3.** listen attentively to understand the information/ instructions being given
- GS4.** communicate politely and professionally
- GS5.** plan and prioritise tasks to ensure timely completion
- GS6.** co-ordinate with co-workers to achieve work objectives
- GS7.** identify possible disruptions to work and take preventive measures
- GS8.** take quick decisions to deal with any emergencies/ accidents
- GS9.** 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>Raise rice seedlings in the mat-type wet method nursery</i>	8	10	-	8
PC1. select an appropriate field for the mat-type wet method nursery with the required dimensions	-	-	-	-
PC2. ensure the field is level without waterlogging problems and has proximity to a source of quality water for irrigation purposes	-	-	-	-
PC3. carry out levelling in the field after irrigating it with the recommended quantity of water	-	-	-	-
PC4. prepare puddled and raised seedbed of the recommended dimensions	-	-	-	-
PC5. prepare the soil mixture using recommended quantity of soil, well-decomposed pressmud/ bio-gas slurry/ Farm Yard Manure (FYM), rice hull, powdered di-ammonium phosphate, and appropriate fertilisers	-	-	-	-
PC6. apply a cover of banana leaves with the mid-rib removed/ polyethylene sheets on the soil surface to prevent seedling roots from penetrating the bottom soil layer	-	-	-	-
PC7. set up sliced banana bracts or other appropriate material on the sides of the seedbed to prevent the soil and seeds from being washed away	-	-	-	-
PC8. set up the wooden or metallic frame of recommended dimensions and place it appropriately above the polyethylene sheet for preparing nursery cakes	-	-	-	-
PC9. fill in the recommended quantity of soil from the surrounding field, into the frame and level it, as required	-	-	-	-
PC10. pre-germinate the rice seeds following the appropriate seed soaking method	-	-	-	-

Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. sow the recommended quantity of pre-germinated/ sprouted seeds on the seedbed, maintaining the recommended planting density	-	-	-	-
PC12. cover the seedbed with the recommended quantity of dry soil or rice straw or gunny bags/ net to protect the seedlings from birds, ensuring the soil or rice straw is disease and insect free	-	-	-	-
PC13. water the seedbed with the recommended quantity immediately after sowing	-	-	-	-
PC14. remove the dry soil/ rice straw after the recommended period when seedlings germinate and attain the appropriate growth not to be eaten by birds	-	-	-	-
PC15. carry out regular irrigation of the seedbed appropriately as per the recommended irrigation schedule, maintaining the recommended water level	-	-	-	-
PC16. tap the seedlings lightly as recommended to ensure the rice seeds come in contact with the base of the seedbed	-	-	-	-
<i>Raise rice seedlings in the mat-type dry method nursery</i>	8	12	-	6
PC17. select an appropriate field for a dry nursery with the required dimensions	-	-	-	-
PC18. ensure the field has loamy soil with an effective drainage capacity	-	-	-	-
PC19. check the field has recommended exposure to sunlight along with access to a reliable supply of quality water	-	-	-	-
PC20. carry out ploughing in the field as recommended to achieve fine tilth	-	-	-	-
PC21. carry out levelling in the field and apply the recommended quantity of FYM and relevant fertilisers	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC22. prepare the seedbed of recommended dimensions and ground surface for appropriate levelling	-	-	-	-
PC23. apply a cover of plastic sheet on the levelled surface	-	-	-	-
PC24. prepare a mixture of sieved soil and vermicompost, ensuring it is free from stones and debris	-	-	-	-
PC25. set up a frame using square pipes of the recommended size	-	-	-	-
PC26. fill in and spread the sieved soil mixture in the frame	-	-	-	-
PC27. level the soil mixture as per the height of the frame, ensuring the seedbed has the recommended height	-	-	-	-
PC28. water the soil in the seedbed through sprinkling with the recommended quantity	-	-	-	-
PC29. sow the recommended quantity of sprouted rice seeds in the nursery bed, using a manual seeder or through manual broadcasting, maintaining the recommended planting density	-	-	-	-
PC30. cover the planted seeds with the mixture of sand and finely powdered FYM	-	-	-	-
PC31. remove the frame appropriately after the recommended period, ensuring the nursery cake is formed, as required	-	-	-	-
PC32. remove any extra soil mixture from the corners of the nursery cake	-	-	-	-
PC33. cover the bed with straw and drench it with the recommended quantity of water, and remove the straw when seeds germinate	-	-	-	-
PC34. maintain the recommended water level in the seedbed	-	-	-	-
<i>Raise rice seedlings in the tray-type dry method nursery</i>	8	10	-	8

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC35. select an appropriate field for a tray-type dry method nursery with the required dimensions, ensuring adequate space for placing trays in the field	-	-	-	-
PC36. ensure the field is level without waterlogging problems and has proximity to a source of quality water for irrigation purposes	-	-	-	-
PC37. carry out ploughing and level the field, as required	-	-	-	-
PC38. prepare a raised seedbed of the recommended dimensions, creating nursery bed ground and channels	-	-	-	-
PC39. ensure the nursery bed has adequate space for placing seed trays	-	-	-	-
PC40. use an appropriate number of plastic trays for nursery operations as per the requirement	-	-	-	-
PC41. prepare a mixture of sieved soil and vermicompost and fill the plastic trays with it manually or using the automatic soil filling machine	-	-	-	-
PC42. water the soil mixture in the trays through sprinkling	-	-	-	-
PC43. spread seeds on plastic tray manually or using the seeder machine, maintaining the recommended density	-	-	-	-
PC44. apply a cover of topsoil on trays and sprinkle dry soil/media on the seeds in the recommended quantity	-	-	-	-
PC45. carry the trays to the field and place the trays on the nursery bed	-	-	-	-
PC46. use black net/ paddy straw to protect sprouted seeds from direct sunlight and heavy rain	-	-	-	-
PC47. maintain water in the channel below or up to the tray surface, as appropriate, along with appropriate water levels in the field soil	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC48. remove black net after the recommended period when seeds germinate	-	-	-	-
<i>Maintain, harvest and store the rice seedlings</i>	6	8	-	8
PC49. apply the recommended organic/ inorganic fertilisers to the rice seedlings in the recommended quantity for their healthy growth	-	-	-	-
PC50. identify the signs of pest and disease infestation in the rice seedlings	-	-	-	-
PC51. apply the recommended insecticides/ pesticides to the rice seedlings in the prescribed quantity to protect them from pests and insects	-	-	-	-
PC52. maintain the rice seedlings for the recommended duration in the nursery bed	-	-	-	-
PC53. identify the signs of maturity of rice seedlings and harvest them using the appropriate tools and equipment	-	-	-	-
PC54. apply the recommended pesticides/ insecticides in the storage area to remove pests/ insects before storing the harvested rice seedlings	-	-	-	-
PC55. store the harvested rice seedlings at the recommended temperature and humidity	-	-	-	-
NOS Total	30	40	-	30

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	AGR/N1146
NOS Name	Raise rice seedlings in the nursery
Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Farm Machinery, Equipment Operation and Maintenance
NSQF Level	4
Credits	1
Version	1.0
Last Reviewed Date	25/11/2021
Next Review Date	25/11/2024
NSQC Clearance Date	25/11/2021

Qualification Pack

AGR/N9903: Maintain health and safety at the workplace

Description

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

Scope

The scope covers the following :

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

Elements and Performance Criteria

Maintain personal hygiene

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

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

Maintain clean and safe workplace

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

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

Administer appropriate emergency procedures

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

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

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

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

Generic Skills (GS)

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

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

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

Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Maintain personal hygiene</i>	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	-	-	-	-

Qualification Pack

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

Qualification Pack

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	3.0
Last Reviewed Date	26/05/2022
Next Review Date	27/05/2024
NSQC Clearance Date	27/05/2021

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

Qualification Pack

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

Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Introduction to Employability Skills</i>	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	-	-

Qualification Pack

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	30/06/2025
NSQC Clearance Date	30/06/2022

Assessment Guidelines and Assessment Weightage

Assessment Guidelines

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.

The assessment for the theory part will be based on knowledge bank of questions created by the SSC.

Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below).

Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training center based on these criteria.

In case of successfully passing only certain number of NOSs, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack.

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

Minimum Aggregate Passing % at QP Level : 70

Qualification Pack

(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/N1143.Prepare the rice transplanter machine for operation	30	40	-	30	100	25
AGR/N1144.Operate the rice transplanter machine	30	40	-	30	100	20
AGR/N1145.Carry out repair and maintenance of the rice transplanter machine	30	40	-	30	100	20
AGR/N1146.Raise rice seedlings in the nursery	30	40	-	30	100	20
AGR/N9903.Maintain health and safety at the workplace	40	25	-	35	100	10
DGT/VSQ/N0102.Employability Skills (60 Hours)	20	30	-	-	50	5
Total	180	215	-	155	550	100

Qualification Pack

Acronyms

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and 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.

Qualification Pack

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.