









Power Tiller Operator

QP Code: AGR/Q1103

Version: 4.0

NSQF Level: 3

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









Contents

AGR/Q1103: Power Tiller Operator	3
Brief Job Description	3
Applicable National Occupational Standards (NOS)	3
Compulsory NOS	3
Qualification Pack (QP) Parameters	
AGR/N1107: Prepare a power tiller for operation	
AGR/N1108: Operate a power tiller for various farm operations	10
AGR/N1110: Carry out various operations using power tiller attachments	15
AGR/N1111: Carry out minor repair and of power tiller	22
AGR/N9903: Maintain health and safety at the workplace	28
DGT/VSQ/N0101: Employability Skills (30 Hours)	
Assessment Guidelines and Weightage	39
Assessment Guidelines	
Assessment Weightage	
Acronyms	
Glossary	42









AGR/Q1103: Power Tiller Operator

Brief Job Description

A Power Tiller Operator operates a power tiller as part of tilling operations at a farm and performs other farm operations by connecting relevant attachments to it. The individual is also responsible for carrying out periodical repair and maintenance of the power tiller.

Personal Attributes

The individual must have an aptitude for machines and be physically fit to work for long hours. The person must be able to take decisions pertaining to the area of work and co-ordinate with others to achieve work objectives.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

- 1. AGR/N1107: Prepare a power tiller for operation
- 2. AGR/N1108: Operate a power tiller for various farm operations
- 3. AGR/N1110: Carry out various operations using power tiller attachments
- 4. AGR/N1111: Carry out minor repair and of power tiller
- 5. AGR/N9903: Maintain health and safety at the workplace
- 6. DGT/VSQ/N0101: Employability Skills (30 Hours)

Qualification Pack (QP) Parameters

Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Farm Machinery, Equipment Operation and Maintenance
Country	India
NSQF Level	3
Credits	9









Aligned to NCO/ISCO/ISIC Code	NCO-2015/8341.0200
Minimum Educational Qualification & Experience	10th grade pass (or equivalent) OR 8th grade pass with 3 Years of experience relevant experience in Agriculture and allied sectors OR 5th grade pass with 6 Years of experience relevant experience in Agriculture and allied sectors OR Previous relevant Qualification of NSQF Level (2.5) with 1.5 years of experience relevant experience in Agriculture and allied sectors OR Previous relevant Qualification of NSQF Level (2) with 3 Years of experience relevant experience in Agriculture and allied sectors
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	30/05/2027
NSQC Approval Date	30/05/2024
Version	4.0
Reference code on NQR	QG-03-AG-02610-2024-V2-ASCI
NQR Version	2.0









AGR/N1107: Prepare a power tiller for operation

Description

This OS unit is about carrying out daily checks on a power tiller and arranging necessary resources for farm operations.

Scope

The scope covers the following:

- · Perform the daily checks
- Arrange the necessary resources

Elements and Performance Criteria

Perform the daily checks

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

- **PC1.** park the power tiller on a level ground
- **PC2.** place the power tiller engine in the horizontal position for checks
- **PC3.** check that all the operating controls such as ropes, cables, rods are positioned correctly
- **PC4.** inspect all the nuts and bolts such as axle bolts, tyre bolts, wheel hub nuts are secured tightly
- **PC5.** examine under and around the power tiller for any kind of fluid leakage
- **PC6.** check various fluids such as engine oil, gearbox oil, air-cleaner oil, coolant and fuel for the prescribed levels
- **PC7.** adjust the fan and transmission belt tension to the required level
- **PC8.** adjust clutch, brake and side clutch as per the operator's manual
- **PC9.** check if the tines, forks, blades and knives are attached firmly to the power tiller
- **PC10.** inspect that all the safety guards are firmly placed
- **PC11.** apply the recommended grade of grease/ lubricant on all moving parts, joints of levers, rearwheel shaft and tension pulley
- **PC12.** examine the exhaust for any wear and tear or damage
- **PC13.** check the oil pressure indicator for the required level of oil pressure
- PC14. inspect the power tiller for any abnormal sound and vibration
- **PC15.** check the tyres for the recommended air pressure
- PC16. replace the worn out or damaged guard/ any other component as per the operator's manual
- **PC17.** maintain a detailed record of the daily check
- **PC18.** arrange for the power tiller to be examined by the manufacturer for issues beyond own purview

Arrange the necessary resources

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









- **PC19.** arrange the relevant Personal Protective Equipment (PPE) such as gloves, shoes, goggles, helmet, ear-protectors for the operation
- PC20. check the PPE to ensure it is safe for use
- PC21. replace any faulty/ damaged PPE with the new one
- PC22. arrange any additional attachments and tools as per the requirement

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** own job responsibilities and limits of authority
- **KU2.** applicable record-keeping requirements in the job role
- **KU3.** applicable health and safety standards and requirements
- **KU4.** the Standard Operating Procedure (SOP) for testing a power tiller
- **KU5.** design and functions of various power tiller components
- **KU6.** common problems and repair needs of a power tiller
- **KU7.** correct method of carrying out any repair and maintenance on a power tiller
- KU8. various attachments used with a power tiller
- **KU9.** various types of adjustments required in a power tiller
- **KU10.** importance of performing regular inspection and maintenance of various farm machineries
- **KU11.** relevant environmental and occupational hazards
- KU12. use of relevant PPE and clothing
- KU13. Dangerous Machines (Regulation) Act, 1983

Generic Skills (GS)

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

- **GS1.** write work-related notes and observations
- GS2. read the relevant literature to get updated information about the field of work
- **GS3.** communicate clearly and politely
- **GS4.** listen attentively to comprehend the information given by the speaker
- **GS5.** plan and prioritise tasks to ensure timely completion
- **GS6.** take quick decisions to resolve work-related issues
- **GS7.** plan efficient use of time and resources
- **GS8.** apply domain knowledge and experience to improve work processes









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Perform the daily checks	20	25	-	20
PC1. park the power tiller on a level ground	-	-	-	-
PC2. place the power tiller engine in the horizontal position for checks	-	-	-	-
PC3. check that all the operating controls such as ropes, cables, rods are positioned correctly	-	-	-	-
PC4. inspect all the nuts and bolts such as axle bolts, tyre bolts, wheel hub nuts are secured tightly	-	-	-	-
PC5. examine under and around the power tiller for any kind of fluid leakage	-	-	-	-
PC6. check various fluids such as engine oil, gearbox oil, air-cleaner oil, coolant and fuel for the prescribed levels	-	-	-	-
PC7. adjust the fan and transmission belt tension to the required level	-	-	-	-
PC8. adjust clutch, brake and side clutch as per the operator's manual	-	-	-	-
PC9. check if the tines, forks, blades and knives are attached firmly to the power tiller	-	-	-	-
PC10. inspect that all the safety guards are firmly placed	-	-	-	-
PC11. apply the recommended grade of grease/ lubricant on all moving parts, joints of levers, rear-wheel shaft and tension pulley	-	-	-	-
PC12. examine the exhaust for any wear and tear or damage	-	-	-	-
PC13. check the oil pressure indicator for the required level of oil pressure	-	-	-	-
PC14. inspect the power tiller for any abnormal sound and vibration	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC15. check the tyres for the recommended air pressure	-	-	-	-
PC16. replace the worn out or damaged guard/ any other component as per the operator's manual	-	-	-	-
PC17. maintain a detailed record of the daily check	-	-	-	-
PC18. arrange for the power tiller to be examined by the manufacturer for issues beyond own purview	-	-	-	-
Arrange the necessary resources	10	15	-	10
PC19. arrange the relevant Personal Protective Equipment (PPE) such as gloves, shoes, goggles, helmet, ear-protectors for the operation	-	-	-	-
PC20. check the PPE to ensure it is safe for use	-	-	-	-
PC21. replace any faulty/ damaged PPE with the new one	-	-	-	-
PC22. arrange any additional attachments and tools as per the requirement	-	-	-	-
NOS Total	30	40	-	30









National Occupational Standards (NOS) Parameters

NOS Code	AGR/N1107
NOS Name	Prepare a power tiller for operation
Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Farm Machinery, Equipment Operation and Maintenance
NSQF Level	3
Credits	2
Version	3.0
Last Reviewed Date	30/05/2024
Next Review Date	30/05/2027
NSQC Clearance Date	30/05/2024









AGR/N1108: Operate a power tiller for various farm operations

Description

This OS unit is about using a power tiller to perform a variety of farm operations after preparing the field for farm operations.

Scope

The scope covers the following:

- Prepare the field for power tiller operations
- Operate power tiller to carry out field operations

Elements and Performance Criteria

Prepare the field for power tiller operations

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

- **PC1.** inspect the field to ensure that it is free of potentially hazardous obstacles such as glass, large stones, wires, etc.
- **PC2.** check the wetness of the soil to determine its suitability for the movement of power tiller
- **PC3.** carry out weeding of any long vegetation from the field
- **PC4.** remove all debris and waste material from the field to allow for smooth movement of power tiller
- **PC5.** perform a soil test to assess the need for any kind of soil treatment
- **PC6.** apply the necessary treatment such as lime, fertilizer, sulphur before tilling to allow it to integrate into the soil during tilling
- **PC7.** ensure that there is nobody on the field without any reason

Operate power tiller to carry out field operations

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

- PC8. place the power tiller on a flat ground
- **PC9.** connect the required attachment to the power tiller
- **PC10.** remove any debris from the power tiller tines
- **PC11.** pull the tine clutch lever forward until it locks into place to disengage the tines
- PC12. start the power tiller as per the SOP
- **PC13.** operate the power tiller at a speed suitable to its capability and the field conditions
- **PC14.** break the soil as per the requirement
- **PC15.** carry out tilling to the optimal depth recommended for the proposed crop
- **PC16.** raise the tines for shallower tilling when the engine Revolutions Per Minute (RPM) decreases or stalls due to overloading
- **PC17.** carry out cross-tilling as per the requirement on extra hard and dry soil
- PC18. carry out tilling in a pattern to achieve machine efficiency









- **PC19.** apply seed in the field at the recommended speed by attaching a seed spreader to the power tiller
- PC20. use the relevant PPE while carrying out field operations

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** own job responsibilities and limits of authority
- KU2. Dangerous Machines (Regulation) Act, 1983
- **KU3.** design, functions and advantages of using a power tiller
- **KU4.** the correct process of operating a power tiller
- **KU5.** the correct process of hitching various attachments to a power tiller for different purposes
- **KU6.** ideal conditions for the operation of a power tiller
- **KU7.** various adjustments required in a power tiller for its optimum performance
- KU8. process of applying fertilizers, sulphur and lime on the soil before tilling
- **KU9.** impact of soil moisture and hardness on power tiller operations
- KU10. common repair and maintenance needs of a power tiller
- **KU11.** correct method of carrying out repair and replacement on a power tiller
- **KU12.** relevant occupational and environmental hazards and the ways to deal with them
- **KU13.** relevant PPE and its correct use

Generic Skills (GS)

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

- **GS1.** make work-related notes
- **GS2.** read the relevant literature to get the latest updates and information about new technologies
- GS3. communicate professionally with clients and co-workers as per the business code of conduct
- **GS4.** listen attentively to understand the information/ instructions being given by the speaker
- **GS5.** plan and schedule tasks to ensure timely completion
- **GS6.** identify possible disruptions to work and take preventive measures
- **GS7.** apply domain knowledge and experience to suggest appropriate solutions to customers
- **GS8.** take quick decisions in case of any emergencies/ accidents









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Prepare the field for power tiller operations	15	20	-	15
PC1. inspect the field to ensure that it is free of potentially hazardous obstacles such as glass, large stones, wires, etc.	-	-	-	-
PC2. check the wetness of the soil to determine its suitability for the movement of power tiller	-	-	-	-
PC3. carry out weeding of any long vegetation from the field	-	-	-	-
PC4. remove all debris and waste material from the field to allow for smooth movement of power tiller	-	-	-	-
PC5. perform a soil test to assess the need for any kind of soil treatment	-	-	-	-
PC6. apply the necessary treatment such as lime, fertilizer, sulphur before tilling to allow it to integrate into the soil during tilling	-	-	-	-
PC7. ensure that there is nobody on the field without any reason	-	-	-	-
Operate power tiller to carry out field operations	15	20	-	15
PC8. place the power tiller on a flat ground	-	-	-	-
PC9. connect the required attachment to the power tiller	-	-	-	-
PC10. remove any debris from the power tiller tines	-	-	-	-
PC11. pull the tine clutch lever forward until it locks into place to disengage the tines	-	-	-	-
PC12. start the power tiller as per the SOP	-	-	-	-
PC13. operate the power tiller at a speed suitable to its capability and the field conditions	-	-	-	-
PC14. break the soil as per the requirement	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC15. carry out tilling to the optimal depth recommended for the proposed crop	-	-	-	-
PC16. raise the tines for shallower tilling when the engine Revolutions Per Minute (RPM) decreases or stalls due to overloading	-	-	-	-
PC17. carry out cross-tilling as per the requirement on extra hard and dry soil	-	-	-	-
PC18. carry out tilling in a pattern to achieve machine efficiency	-	-	-	-
PC19. apply seed in the field at the recommended speed by attaching a seed spreader to the power tiller	-	-	-	-
PC20. use the relevant PPE while carrying out field operations	-	-	-	-
NOS Total	30	40	-	30









National Occupational Standards (NOS) Parameters

NOS Code	AGR/N1108
NOS Name	Operate a power tiller for various farm operations
Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Farm Machinery, Equipment Operation and Maintenance
NSQF Level	3
Credits	2
Version	3.0
Last Reviewed Date	30/05/2024
Next Review Date	30/05/2027
NSQC Clearance Date	30/05/2024









AGR/N1110: Carry out various operations using power tiller attachments

Description

This OS unit is about attaching various attachments to a power tiller to carry out a variety of farm operations.

Scope

The scope covers the following:

- Carry out puddling by attaching cage wheels
- Cultivate the field by attaching cultivator
- Apply seeds and fertilizer by attaching seed-cum-fertilizer drill
- Reap the crop by attaching reaper
- Spray insecticides and pesticides by attaching boom sprayer
- Slash and shred the crop by attaching slasher cum in-situ shredder
- Pump water by attaching a water pump

Elements and Performance Criteria

Carry out puddling by attaching cage wheels

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

- **PC1.** remove the power tiller tyres as per the operator's manual
- **PC2.** attach lugged wheels or drum type cage wheels to power tiller according to the soil conditions
- **PC3.** attach curved tynes to the rotary
- **PC4.** attach the tail wheel float to control the depth of digging
- **PC5.** determine the availability of the required level of water in the field for puddling
- **PC6.** carry out puddling to achieve the required puddle and field levelling

Cultivate the field by attaching cultivator

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

- **PC7.** hitch cultivator to the power tiller as per the SOP
- **PC8.** adjust the cultivator to achieve the required level of cultivation depth for placing seeds
- **PC9.** operate cultivator as per the SOP
- **PC10.** check the cultivator regularly during operation for clogging

Apply seeds and fertilizer by attaching seed-cum-fertilizer drill

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

- **PC11.** attach seed-cum-fertilizer drill to power tiller as per the SOP
- **PC12.** adjust the drill as per the requirement
- PC13. fill in seeds and fertilizer in the seed and fertilizer boxes to the desired level
- PC14. apply seeds and fertilizer in the field at the recommended speed

Reap the crop by attaching reaper

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









- **PC15.** examine the reaper knives for sharpness
- PC16. connect reaper with the power tiller as per the SOP
- **PC17.** apply necessary adjustments to reaper as per the requirements
- **PC18.** operate reaper at a speed suitable to crop and farm conditions
- PC19. check the reaper regularly for clogging during operation

Spray insecticides and pesticides by attaching boom sprayer

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

- **PC20.** inspect the spray boom, mast, spray pump, pressure regulator and chemical tank for any wear and tear or damage
- PC21. mount the boom sprayer on the power tiller as per the SOP
- **PC22.** hitch the tail wheel frame to the power tiller
- **PC23.** check the boom sprayer is secured firmly
- PC24. adjust the spacing between the spraying nozzles
- PC25. operate the boom sprayer as per the operator's manual to spray insecticides and pesticides

Slash and shred the crop by attaching slasher cum in-situ shredder

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

- PC26. mount slasher cum in-situ shredder on the power tiller chassis frame as per the SOP
- PC27. install a v-belt to transmit power tiller's engine power to slasher cum in-situ shredder
- PC28. check the v-belt for the prescribed level of tension
- **PC29.** install cutting blades on the curved rotary header in slashing assembly
- **PC30.** operate slasher cum in-situ shredder as per the operator's manual
- **PC31.** use protection hood while shredding to ensure own safety and prevent the shredded crop from scattering

Pump water by attaching a water pump

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

- PC32. set up the water pump on a pump stand at the identified spot
- **PC33.** connect the water pump with the power tiller
- PC34. install a v-belt to allow transmission of power from the power tiller to the water pump
- **PC35.** inspect the v-belt for the correct level of tension
- **PC36.** start the power tiller to pump water
- **PC37.** pump water using power tiller for the recommended duration

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. Dangerous Machines (Regulation) Act, 1983
- **KU2.** different types of power tiller and their advantages
- KU3. design, functions and advantages of various attachments used with a power tiller
- **KU4.** components of various power tiller attachments
- **KU5.** the correct process of hitching/ unhitching various attachments with a power tiller









- **KU6.** common problems encountered while using a power tiller with attachments
- **KU7.** basic troubleshooting for common problems with power tiller and relevant attachments
- **KU8.** seedbed preparation, sowing, reaping and other operations done with the use of power tiller attachments
- KU9. suitable conditions for the operation of a power tiller

Generic Skills (GS)

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

- **GS1.** write work-related notes
- **GS2.** read the relevant user guides, manuals, policies and schemes
- GS3. listen attentively to understand the information/ instructions given by the speaker
- **GS4.** co-ordinate with co-workers to achieve work objectives
- **GS5.** communicate professionally and courteously
- **GS6.** plan efficient use of time and resources
- **GS7.** plan and schedule tasks for timely completion
- **GS8.** take quick decisions to resolve any disruptions to work
- **GS9.** use domain knowledge and experience to identify improvements in work processes
- **GS10.** perform basic calculations and accounting









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Carry out puddling by attaching cage wheels	5	10	-	5
PC1. remove the power tiller tyres as per the operator's manual	-	-	-	-
PC2. attach lugged wheels or drum type cage wheels to power tiller according to the soil conditions	-	-	-	-
PC3. attach curved tynes to the rotary	-	-	-	-
PC4. attach the tail wheel float to control the depth of digging	-	-	-	-
PC5. determine the availability of the required level of water in the field for puddling	-	-	-	-
PC6. carry out puddling to achieve the required puddle and field levelling	-	-	-	-
Cultivate the field by attaching cultivator	5	5	-	5
PC7. hitch cultivator to the power tiller as per the SOP	-	-	-	-
PC8. adjust the cultivator to achieve the required level of cultivation depth for placing seeds	-	-	-	-
PC9. operate cultivator as per the SOP	-	-	-	-
PC10. check the cultivator regularly during operation for clogging	-	-	-	-
Apply seeds and fertilizer by attaching seed-cum- fertilizer drill	5	5	-	5
PC11. attach seed-cum-fertilizer drill to power tiller as per the SOP	-	-	-	-
PC12. adjust the drill as per the requirement	-	-	-	-
PC13. fill in seeds and fertilizer in the seed and fertilizer boxes to the desired level	-	-	-	-
PC14. apply seeds and fertilizer in the field at the recommended speed	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Reap the crop by attaching reaper	5	5	-	5
PC15. examine the reaper knives for sharpness	-	-	-	-
PC16. connect reaper with the power tiller as per the SOP	-	-	-	-
PC17. apply necessary adjustments to reaper as per the requirements	-	-	-	-
PC18. operate reaper at a speed suitable to crop and farm conditions	-	-	-	-
PC19. check the reaper regularly for clogging during operation	-	-	-	-
Spray insecticides and pesticides by attaching boom sprayer	5	5	-	5
PC20. inspect the spray boom, mast, spray pump, pressure regulator and chemical tank for any wear and tear or damage	-	-	-	-
PC21. mount the boom sprayer on the power tiller as per the SOP	-	-	-	-
PC22. hitch the tail wheel frame to the power tiller	-	-	-	-
PC23. check the boom sprayer is secured firmly	-	-	-	-
PC24. adjust the spacing between the spraying nozzles	-	-	-	-
PC25. operate the boom sprayer as per the operator's manual to spray insecticides and pesticides	-	-	-	-
Slash and shred the crop by attaching slasher cum in-situ shredder	2	5	-	3
PC26. mount slasher cum in-situ shredder on the power tiller chassis frame as per the SOP	-	-	-	-
PC27. install a v-belt to transmit power tiller's engine power to slasher cum in-situ shredder	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC28. check the v-belt for the prescribed level of tension	-	-	-	-
PC29. install cutting blades on the curved rotary header in slashing assembly	-	-	-	-
PC30. operate slasher cum in-situ shredder as per the operator's manual	-	-	-	-
PC31. use protection hood while shredding to ensure own safety and prevent the shredded crop from scattering	-	-	-	-
Pump water by attaching a water pump	3	5	-	2
PC32. set up the water pump on a pump stand at the identified spot	-	-	-	-
PC33. connect the water pump with the power tiller	-	-	-	-
PC34. install a v-belt to allow transmission of power from the power tiller to the water pump	-	-	-	-
PC35. inspect the v-belt for the correct level of tension	-	-	-	-
PC36. start the power tiller to pump water	-	-	-	-
PC37. pump water using power tiller for the recommended duration	-	-	-	-
NOS Total	30	40	-	30









National Occupational Standards (NOS) Parameters

NOS Code	AGR/N1110
NOS Name	Carry out various operations using power tiller attachments
Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Farm Machinery, Equipment Operation and Maintenance
NSQF Level	3
Credits	1
Version	3.0
Last Reviewed Date	30/05/2024
Next Review Date	30/05/2027
NSQC Clearance Date	30/05/2024









AGR/N1111: Carry out minor repair and of power tiller

Description

This OS unit is about carrying out repair and periodical maintenance of a power tiller to keep it operational.

Scope

The scope covers the following:

- Carry out repair and maintenance
- Comply with the health and safety standards
- Perform waste management
- Optimise resource utilisation

Elements and Performance Criteria

Carry out repair and maintenance

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

- **PC1.** arrange the appropriate tools, equipment and spare parts for repair and maintenance activities
- **PC2.** examine all the nuts and bolts for the recommended torque and locking
- **PC3.** inspect the tyres for the recommended air pressure and any wear and tear/ damage
- **PC4.** inspect the power tiller's electrical system for the correct functioning
- **PC5.** check the oil pressure indicator for the recommended oil pressure
- **PC6.** clean the power tiller as per the operator's manual
- **PC7.** apply the recommended grade of grease/ lubricant on all the greasing points such as main clutch thrust bearing, intermediate bearing, clutch lever, rotavator shaft, arm shafts and shift fork, etc.
- **PC8.** clean the crankcase and oil screen assembly as per the SOP
- **PC9.** adjust accelerator, brake, clutch, v-belt, fan-belt, etc. as per the operator's manual
- **PC10.** set the injector pressure to the recommended level
- **PC11.** replace the engine oil, gear case oil, coolant etc. as per the maintenance schedule
- PC12. replace the worn-out filters such as oil filter/ air cleaner filter/ fuel filter
- **PC13.** install new and compatible rotavator blades and tyres to replace the ones worn-out or damaged
- **PC14.** maintain the record of maintenance
- **PC15.** schedule the next maintenance as per the maintenance schedule

Comply with the health and safety standards

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

- **PC16.** use the recommended PPE and clothing while carrying out repair and maintenance activities
- **PC17.** apply the relevant health and safety standards to deal with any emergencies/ accidents
- PC18. replace the worn-out/ damaged PPE and clothing









PC19. report any hazards/ accidents to the relevant authority in a timely manner

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

Optimise resource utilisation

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

- PC23. optimise usage of various material in different tasks/ activities/ processes
- PC24. optimise usage of water/ electricity/ energy in various tasks/ activities/ processes
- PC25. connect electrical tools and equipment safely and turn off when not in use

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** relevant documentation requirements
- KU2. importance of following health and safety standards in farm operations
- **KU3.** relevant occupational and environmental hazards and the ways to deal with them
- **KU4.** use of relevant PPE and clothing
- **KU5.** how to administer first aid and request further medical assistance
- **KU6.** the process of reporting any workplace emergencies/ accidents to the relevant authority
- **KU7.** various tools, equipment and spare parts required for the repair and maintenance of a power tiller
- **KU8.** various components of a power tiller
- **KU9.** the importance and process of carrying out regular repair and maintenance of the power tiller and its components
- **KU10.** the maintenance schedule for different types of power tiller
- **KU11.** various adjustments required in a power tiller during maintenance
- KU12. Dangerous Machines (Regulation) Act, 1983
- **KU13.** waste management and methods of waste disposal
- **KU14.** common sources of pollution
- **KU15.** correct method of recycling different types of waste
- **KU16.** importance of following environmental and ecological best practices to minimise the impact on the environment
- **KU17.** benefits of resource optimisation
- KU18. ways of efficiently managing various materials used in farm operations
- **KU19.** common practices of conserving electricity

Generic Skills (GS)

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









- **GS1.** prepare work-related notes and records
- **GS2.** read and interpret the relevant guides, manuals and literature about the latest technologies and trends
- GS3. listen attentively to understand the information/ instructions being given by the speaker
- **GS4.** communicate politely and professionally
- **GS5.** co-ordinate with co-workers to achieve the organisational goals
- GS6. take quick decisions within the limit of authority to resolve disruptions to work
- **GS7.** plan and schedule tasks to ensure timely completion
- **GS8.** analyse work processes to identify relevant improvements
- **GS9.** evaluate all possible solutions to a problem before selecting the best one









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Carry out repair and maintenance	20	25	-	20
PC1. arrange the appropriate tools, equipment and spare parts for repair and maintenance activities	-	-	-	-
PC2. examine all the nuts and bolts for the recommended torque and locking	-	-	-	-
PC3. inspect the tyres for the recommended air pressure and any wear and tear/ damage	-	-	-	-
PC4. inspect the power tiller's electrical system for the correct functioning	-	-	-	-
PC5. check the oil pressure indicator for the recommended oil pressure	-	-	-	-
PC6. clean the power tiller as per the operator's manual	-	-	-	-
PC7. apply the recommended grade of grease/ lubricant on all the greasing points such as main clutch thrust bearing, intermediate bearing, clutch lever, rotavator shaft, arm shafts and shift fork, etc.	-	-	-	-
PC8. clean the crankcase and oil screen assembly as per the SOP	-	-	-	-
PC9. adjust accelerator, brake, clutch, v-belt, fanbelt, etc. as per the operator's manual	-	-	-	-
PC10. set the injector pressure to the recommended level	-	-	-	-
PC11. replace the engine oil, gear case oil, coolant etc. as per the maintenance schedule	-	-	-	-
PC12. replace the worn-out filters such as oil filter/ air cleaner filter/ fuel filter	-	-	-	-
PC13. install new and compatible rotavator blades and tyres to replace the ones worn-out or damaged	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC14. maintain the record of maintenance	-	-	-	-
PC15. schedule the next maintenance as per the maintenance schedule	-	-	-	-
Comply with the health and safety standards	5	10	-	5
PC16. use the recommended PPE and clothing while carrying out repair and maintenance activities	-	-	-	-
PC17. apply the relevant health and safety standards to deal with any emergencies/ accidents	-	-	-	-
PC18. replace the worn-out/ damaged PPE and clothing	-	-	-	-
PC19. report any hazards/ accidents to the relevant authority in a timely manner	-	-	-	-
Perform waste management	5	5	-	5
PC20. segregate waste into different categories	-	-	-	-
PC21. dispose non-recyclable waste appropriately	-	-	-	-
PC22. deposit recyclable and reusable material at the identified location	-	-	-	-
Optimise resource utilisation	-	-	-	-
PC23. optimise usage of various material in different tasks/ activities/ processes	-	-	-	-
PC24. optimise usage of water/ electricity/ energy in various tasks/ activities/ processes	-	-	-	-
PC25. connect electrical tools and equipment safely and turn off when not in use	-	-	-	-
NOS Total	30	40	-	30









National Occupational Standards (NOS) Parameters

NOS Code	AGR/N1111
NOS Name	Carry out minor repair and of power tiller
Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Farm Machinery, Equipment Operation and Maintenance
NSQF Level	3
Credits	1
Version	3.0
Last Reviewed Date	30/05/2024
Next Review Date	30/05/2027
NSQC Clearance Date	30/05/2024









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:









- **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









- 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









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Maintain personal hygiene	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	-	-	-	-
Maintain clean and safe workplace	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	-	-	-	-









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	-	-	-	-
Administer appropriate emergency procedures	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









National Occupational Standards (NOS) Parameters

NOS Code	AGR/N9903
NOS Name	Maintain health and safety at the workplace
Sector	Agriculture
Sub-Sector	Generic
Occupation	Generic
NSQF Level	4
Credits	1
Version	4.0
Last Reviewed Date	30/05/2024
Next Review Date	30/05/2027
NSQC Clearance Date	30/05/2024









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









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









- **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









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Introduction to Employability Skills	1	1	-	-
PC1. understand the significance of employability skills in meeting the job requirements	-	-	-	-
Constitutional values – Citizenship	1	1	-	-
PC2. identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices	-	-	-	-
Becoming a Professional in the 21st Century	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.	-	-	-	-
Basic English Skills	2	3	-	-
PC4. speak with others using some basic English phrases or sentences	-	-	-	-
Communication Skills	1	1	-	-
PC5. follow good manners while communicating with others	-	-	-	-
PC6. work with others in a team	-	-	-	-
Diversity & Inclusion	1	1	-	-
PC7. communicate and behave appropriately with all genders and PwD	-	-	-	-
PC8. report any issues related to sexual harassment	-	-	-	-
Financial and Legal Literacy	3	4	-	-
PC9. use various financial products and services safely and securely	-	-	-	-









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	-	-	-	-
Essential Digital Skills	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	-	-	-	-
Entrepreneurship	3	5	-	-
PC14. identify and assess opportunities for potential business	-	-	-	-
PC15. identify sources for arranging money and associated financial and legal challenges	-	-	-	-
Customer Service	2	2	-	-
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	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	-	-









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	30/05/2024
Next Review Date	30/05/2027
NSQC Clearance Date	30/05/2024

Assessment Guidelines and Assessment Weightage

Assessment Guidelines

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

Minimum Aggregate Passing % at QP Level: 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/N1107.Prepare a power tiller for operation	30	40	-	30	100	20
AGR/N1108.Operate a power tiller for various farm operations	30	40	-	30	100	20
AGR/N1110.Carry out various operations using power tiller attachments	30	40	-	30	100	20
AGR/N1111.Carry out minor repair and of power tiller	30	40	-	30	100	20
AGR/N9903.Maintain health and safety at the workplace	40	25	-	35	100	15
DGT/VSQ/N0101.Employability Skills (30 Hours)	20	30	-	-	50	5
Total	180	215	-	155	550	100









Acronyms

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









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.









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.