









# Combine Harvester Machine Operator

QP Code: AGR/Q1102

Version: 4.0

NSQF Level: 4

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### **AGR/Q1102: Combine Harvester Machine Operator**

#### **Brief Job Description**

A Combine Harvester Machine operator prepares a combine harvester machine for operation, operates it to harvest crop and carries out routine maintenance and repair of the harvester to keep it operational during the critical harvesting period.

#### **Personal Attributes**

The individual must be physically fit to work for long durations. The person must have problem-solving skills along with the ability to co-ordinate with others to achieve the work objectives. The ability to read and write are the other important attributes required for this job role.

#### **Applicable National Occupational Standards (NOS)**

#### **Compulsory NOS:**

- 1. AGR/N1103: Prepare combine harvester machine for operation
- 2. AGR/N1104: Operate the combine harvester machine to harvest grain crop
- 3. AGR/N1105: Perform scheduled basic maintenance of combine harvester machine
- 4. 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
Aligned to NCO/ISCO/ISIC Code	NCO-2015/8341.0201









Minimum Educational Qualification & Experience	12th grade Pass (or equivalent) OR 10th grade pass with 3 Years of experience relevant experience in agriculture and allied sectors OR Previous relevant Qualification of NSQF Level (3.5) with 1.5 years of experience relevant experience in agriculture and allied sectors OR Previous relevant Qualification of NSQF Level (3) 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	LMV Driving license
Minimum Job Entry Age	20 Years
Last Reviewed On	NA
Next Review Date	26/11/2027
NSQC Approval Date	26/11/2024
Version	4.0
Reference code on NQR	QG-04-AG-03417-2024-V2-ASCI
NQR Version	2.0









### AGR/N1103: Prepare combine harvester machine for operation

#### **Description**

This OS unit is about preparing and setting up a combine harvester machine for operation.

#### Scope

The scope covers the following:

- Perform pre-operational checks on combine harvester machine
- Make adjustments to the combine harvester machine

#### **Elements and Performance Criteria**

#### Perform pre-operational checks on combine harvester machine

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

- **PC1.** ensure fuel, engine oil, hydraulic oil, water and coolant level are above the prescribed level and replenish if required
- **PC2.** examine the battery's condition to ensure that wiring harness is intact
- PC3. check the air filters for correct position and cleanliness
- **PC4.** check the tyres for the required level of air pressure
- **PC5.** examine all belts and chains for wear and tear/ damage and the required level of slackness
- **PC6.** check all the guards, nuts and bolts for correct position and the prescribed torque
- **PC7.** check the headlights and indicators for correct functioning
- **PC8.** test that steering and brakes are working as expected
- **PC9.** check all the displays, gauges, indicators, meters on the dashboard and warning alarms
- **PC10.** identify the signs of any wear and tear/ damage such as worn-out/ misaligned bearings, cracks in shoes and tyres, etc.
- **PC11.** apply grease on all the bearings of the machine as per the lubrication schedule provided by the Original Equipment Manufacturer (OEM)
- **PC12.** maintain the record of pre-operational checks

#### Make adjustments to the combine harvester machine

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

- PC13. attach or detach extra kits or machine parts according to the crop to be harvested
- **PC14.** adjust the height and backrest angle of the operator's seat to ensure clear view of the field and comfortable seating
- **PC15.** set the reversing mirrors for a clear view
- **PC16.** adjust the cutter bar and thresher drum as per the manufacturer's instructions

#### **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:









- **KU1.** relevant record-keeping requirements
- **KU2.** prescribed levels for fuel, engine oil, hydraulic oil, water and coolant in the combine harvester machine
- **KU3.** correct positions of air filter
- **KU4.** recommended level of air pressure in combine harvester tyres for field operations
- KU5. appropriate level of slackness for combine harvester belts and chains
- **KU6.** the correct position and prescribed torque for the harvester guards and nuts/ bolts respectively
- **KU7.** common signs of wear and tear or damage for various components of the combine harvester machine
- **KU8.** importance of following the lubrication schedule prescribed by the Original Equipment Manufacturer (OEM)
- KU9. different kits and attachments used with a combine harvester machine
- **KU10.** harvesting process for different types of crop
- **KU11.** appropriate adjustments required in combine harvester machine components such as the cutter bar, thresher drum, table auger, etc.
- **KU12.** basic inspection mechanisms for various parts of a combine harvester such as walkers, rock traps, sprockets, sickle sections, injector lines, chains and belts including the feeder house chains, etc.
- KU13. Dangerous Machines (Regulation) Act, 1983

#### **Generic Skills (GS)**

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

- **GS1.** prepare work-related records and notes
- **GS2.** listen attentively to understand the client/ customer requirements
- **GS3.** plan and prioritise tasks for efficient time-management
- **GS4.** take quick decisions to deal with workplace emergencies/ accidents
- **GS5.** communicate politely and professionally with clients and colleagues
- **GS6.** identify possible disruptions to work and take preventive measures
- **GS7.** read the relevant literature to get latest updates about the field of work









# **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Perform pre-operational checks on combine harvester machine	20	25	-	20
<b>PC1.</b> ensure fuel, engine oil, hydraulic oil, water and coolant level are above the prescribed level and replenish if required	-	-	-	-
<b>PC2.</b> examine the battery's condition to ensure that wiring harness is intact	-	-	-	-
<b>PC3.</b> check the air filters for correct position and cleanliness	-	-	-	-
<b>PC4.</b> check the tyres for the required level of air pressure	-	-	-	-
PC5. examine all belts and chains for wear and tear/ damage and the required level of slackness	-	-	-	-
<b>PC6.</b> check all the guards, nuts and bolts for correct position and the prescribed torque	-	-	-	-
<b>PC7.</b> check the headlights and indicators for correct functioning	-	-	-	-
<b>PC8.</b> test that steering and brakes are working as expected	-	-	-	-
<b>PC9.</b> check all the displays, gauges, indicators, meters on the dashboard and warning alarms	-	-	-	-
<b>PC10.</b> identify the signs of any wear and tear/damage such as worn-out/misaligned bearings, cracks in shoes and tyres, etc.	-	-	-	-
<b>PC11.</b> apply grease on all the bearings of the machine as per the lubrication schedule provided by the Original Equipment Manufacturer (OEM)	-	-	-	-
PC12. maintain the record of pre-operational checks	-	-	-	-
Make adjustments to the combine harvester machine	10	15	-	10









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC13.</b> attach or detach extra kits or machine parts according to the crop to be harvested	-	-	-	-
<b>PC14.</b> adjust the height and backrest angle of the operator's seat to ensure clear view of the field and comfortable seating	-	-	-	-
PC15. set the reversing mirrors for a clear view	-	-	-	-
<b>PC16.</b> adjust the cutter bar and thresher drum as per the manufacturer's instructions	-	-	-	-
NOS Total	30	40	-	30









# **National Occupational Standards (NOS) Parameters**

NOS Code	AGR/N1103
NOS Name	Prepare combine harvester machine for operation
Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Farm Machinery, Equipment Operation and Maintenance
NSQF Level	4
Credits	2
Version	3.0
Last Reviewed Date	26/11/2024
Next Review Date	26/11/2027
NSQC Clearance Date	26/11/2024









# AGR/N1104: Operate the combine harvester machine to harvest grain crop

#### **Description**

This OS unit is about operating the combine harvester machine for harvesting different types of grain crop. It also covers resource optimisation and following the applicable safety guidelines to avoid any accidents.

#### Scope

The scope covers the following:

- Inspect the agriculture farmland and grain crop
- Operate the combine harvester machine
- Optimise resource utilisation
- Apply safety standards during machine operations
- Deal with emergencies and accidents at work

#### **Elements and Performance Criteria**

#### Inspect the agriculture farmland and grain crop

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

- **PC1.** check the soil type and hardness of the field
- **PC2.** assess surface levelling and ground clearance for smooth movement of combine harvester machine
- **PC3.** check the type of grain crop and its readiness for harvesting
- **PC4.** identify the appropriate adjustments required in the combine harvester machine to harvest the crop

#### Operate the combine harvester machine

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

- **PC5.** set the concave gap, upper and lower sieve openings, blower fan speed and the position and Rotation Per Minute (RPM) of reel according to the crop conditions
- **PC6.** operate combine harvester machine at the ground speed suitable to the crop and field conditions
- **PC7.** harvest crop in a pattern to achieve machine efficiency and minimise grain-loss
- **PC8.** check the cutter bar for choking caused by straw/ grain
- **PC9.** examine harvested grain on a regular basis while harvesting to ensure quality output
- **PC10.** check the grain tank regularly to ensure it is not full
- **PC11.** calculate the output of combine harvester machine
- **PC12.** maintain the record of combine harvester operations
- **PC13.** perform troubleshooting for basic problems encountered during harvesting

#### Optimise resource utilisation

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

PC14. optimise usage of material in various tasks/ activities/ processes









- PC15. plug spills/ leakages and escalate to appropriate authority if unable to rectify
- PC16. optimise the usage of water and energy in various tasks/ activities/ processes

#### Apply safety standards during machine operations

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

- **PC17.** use the relevant Personal Protective Equipment (PPE) while operating the combine harvester machine
- **PC18.** check that guards are in place before operating combine harvester machine
- **PC19.** mount or dismount the combine harvester machine only when it is stationary
- **PC20.** instruct the farmer and co-workers not to come near the operational combine harvester machine
- PC21. operate combine harvester machine in a safe and controlled manner
- **PC22.** maintain a safe distance from the moving parts of the machine and overhead electricity lines
- **PC23.** follow guidelines from the manufacturer's safety manual before manually handling the machine
- **PC24.** use the recommended tools and equipment to make any adjustments to the combine harvester machine
- **PC25.** use an access ladder, steps or standing platform during cleaning, maintenance and refuelling *Deal with emergencies and accidents at work*

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

- **PC26.** administer first-aid to the injured persons at work
- **PC27.** communicate with the emergency services to request medical assistance for serious medical emergencies and accidents
- PC28. identify health and safety hazards at work and take preventive measures
- PC29. report the emergencies/ accidents to the appropriate authority

#### **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** relevant record-keeping requirements
- **KU2.** appropriate farm and soil conditions for operating a combine harvester machine
- **KU3.** crop maturity indicators for different types of crop
- **KU4.** appropriate adjustments required to be made to the combine harvester according to the type and condition of the crop to be harvested
- **KU5.** the importance of maintaining the recommended ground clearance
- **KU6.** how to set concave gap, upper and lower sieve openings, blower fan speed and the position and RPM of reel
- **KU7.** recommended speed to operate the combine harvester machine for different types of crop
- **KU8.** relevant practices to minimise grain-loss and increase machine-efficiency during harvesting
- **KU9.** precautions and regular checks while operating the combine harvester machine
- **KU10.** troubleshooting for basic problems encountered during harvesting
- **KU11.** importance of following environmental and ecological best practices to minimise the impact on the environment









- KU12. benefits of different ways of resource optimisation
- KU13. use of the relevant PPE, tools and equipment
- **KU14.** hazards encountered while operating a combine harvester machine
- **KU15.** the importance and ways of minimising risks to self and others while operating the combine harvester machine
- KU16. relevant guards to put in place before operating the combine harvester machine
- **KU17.** safe way of operating the combine harvester machine
- KU18. various adjustments required in the combine harvester during its operation
- KU19. precautions to be taken before manually handling the combine harvester machine
- **KU20.** how to administer first aid and request further medical assistance
- KU21. relevant authority and the process to report emergencies/ accidents encountered at work

#### **Generic Skills (GS)**

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

- **GS1.** read the relevant literature to get information about the latest developments and relevant government policies and schemes
- **GS2.** prepare records relevant to the job profile
- GS3. listen attentively to the speaker to comprehend the information/ instructions being given
- **GS4.** plan and schedule tasks for effective time management
- GS5. communicate politely and professionally
- **GS6.** take quick decisions in case of an emergency/ accident
- **GS7.** identify possible disruptions to work and take appropriate preventive measures









# **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Inspect the agriculture farmland and grain crop	5	10	-	5
PC1. check the soil type and hardness of the field	-	-	-	-
PC2. assess surface levelling and ground clearance for smooth movement of combine harvester machine	-	-	-	-
<b>PC3.</b> check the type of grain crop and its readiness for harvesting	-	-	-	-
<b>PC4.</b> identify the appropriate adjustments required in the combine harvester machine to harvest the crop	-	-	-	-
Operate the combine harvester machine	10	10	-	10
<b>PC5.</b> set the concave gap, upper and lower sieve openings, blower fan speed and the position and Rotation Per Minute (RPM) of reel according to the crop conditions	-	-	-	-
<b>PC6.</b> operate combine harvester machine at the ground speed suitable to the crop and field conditions	-	-	-	-
<b>PC7.</b> harvest crop in a pattern to achieve machine efficiency and minimise grain-loss	-	-	-	-
PC8. check the cutter bar for choking caused by straw/ grain	-	-	-	-
<b>PC9.</b> examine harvested grain on a regular basis while harvesting to ensure quality output	-	-	-	-
<b>PC10.</b> check the grain tank regularly to ensure it is not full	-	-	-	-
<b>PC11.</b> calculate the output of combine harvester machine	-	-	-	-
<b>PC12.</b> maintain the record of combine harvester operations	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC13.</b> perform troubleshooting for basic problems encountered during harvesting	-	-	-	-
Optimise resource utilisation	5	5	-	5
<b>PC14.</b> optimise usage of material in various tasks/ activities/ processes	-	-	-	-
<b>PC15.</b> plug spills/ leakages and escalate to appropriate authority if unable to rectify	-	-	-	-
<b>PC16.</b> optimise the usage of water and energy in various tasks/ activities/ processes	-	-	-	-
Apply safety standards during machine operations	5	10	-	5
<b>PC17.</b> use the relevant Personal Protective Equipment (PPE) while operating the combine harvester machine	-	-	-	-
<b>PC18.</b> check that guards are in place before operating combine harvester machine	-	-	-	-
<b>PC19.</b> mount or dismount the combine harvester machine only when it is stationary	-	-	-	-
<b>PC20.</b> instruct the farmer and co-workers not to come near the operational combine harvester machine	-	-	-	-
<b>PC21.</b> operate combine harvester machine in a safe and controlled manner	-	-	-	-
PC22. maintain a safe distance from the moving parts of the machine and overhead electricity lines	-	-	-	-
<b>PC23.</b> follow guidelines from the manufacturer's safety manual before manually handling the machine	-	-	-	-
<b>PC24.</b> use the recommended tools and equipment to make any adjustments to the combine harvester machine	-	-	-	-
<b>PC25.</b> use an access ladder, steps or standing platform during cleaning, maintenance and refuelling	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Deal with emergencies and accidents at work	5	5	-	5
<b>PC26.</b> administer first-aid to the injured persons at work	-	-	-	-
<b>PC27.</b> communicate with the emergency services to request medical assistance for serious medical emergencies and accidents	-	-	-	-
<b>PC28.</b> identify health and safety hazards at work and take preventive measures	-	-	-	-
<b>PC29.</b> report the emergencies/ accidents to the appropriate authority	-	-	-	-
NOS Total	30	40	-	30









# **National Occupational Standards (NOS) Parameters**

NOS Code	AGR/N1104
NOS Name	Operate the combine harvester machine to harvest grain crop
Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Farm Machinery, Equipment Operation and Maintenance
NSQF Level	4
Credits	2
Version	3.0
Last Reviewed Date	26/11/2024
Next Review Date	26/11/2027
NSQC Clearance Date	26/11/2024









# AGR/N1105: Perform scheduled basic maintenance of combine harvester machine

#### **Description**

This OS unit is about conducting repair and maintenance of the combine harvester machine.

#### Scope

The scope covers the following:

- Clean combine harvester machine
- Carry out maintenance of various machine parts
- Perform waste management

#### **Elements and Performance Criteria**

#### Clean combine harvester machine

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

- **PC1.** park the combine harvester machine on a flat surface
- **PC2.** shut down the combine harvester machine as per the operator's manual instructions
- **PC3.** detach appropriate machine parts and attachments as per the SOP
- **PC4.** clean dust, straw and any other waste from machine parts and kits attached to the combine harvester

#### Carry out maintenance of various machine parts

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

- **PC5.** inspect the engine, cutting/ crop lifter/ feeder house components for malfunction/ wear and tear/ damage
- **PC6.** check all nuts and bolts for the prescribed torque and locking
- **PC7.** check that flat belts, v-belts and roller chains have the recommended level of tension and the fanbelt alignment and fuse change as required
- **PC8.** check battery for the prescribed voltage and electrolyte level
- **PC9.** apply grease or lubricant on the greasing points
- **PC10.** replace the engine oil, hydraulic oil, coolant, oil filter, fuel filter, air cleaner as per the maintenance schedule
- **PC11.** refill the battery with distilled water as per the requirement
- PC12. discharge dirty fuel through the drain plug
- PC13. repair, adjust or replace the worn-out/ malfunctioning/ damaged components as per the SOP
- **PC14.** use the manufacturer-approved spare parts, tools and equipment
- **PC15.** arrange for technical help from a certified mechanic for complex problems
- PC16. maintain the record of repair and maintenance activities
- PC17. schedule the next maintenance as per the maintenance schedule

Perform waste management









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

- **PC18.** segregate waste into different categories
- **PC19.** dispose non-recyclable waste appropriately
- PC20. deposit recyclable and reusable material at the identified location
- PC21. Evaluate and apply techniques to minimize losses during combine operation

#### **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** safe and standard procedure for the maintenance of a combine harvester machine including the handling of relevant tools and equipment such as grease gun, wrench set, socket set, welding set, crescent wrench, etc.
- **KU2.** correct process to detach the relevant combine harvester machine parts and attachments and fit them back
- **KU3.** common repair and maintenance needs of the combine harvester engine, cutting components/ crop lifter components and feeder house components
- **KU4.** correct procedure for the repair and maintenance of various combine harvester machine parts and attachments
- **KU5.** relevant record-keeping requirements
- **KU6.** maintenance schedule for a combine harvester machine
- **KU7.** different methods of recycling and disposing waste
- KU8. common sources of pollution and ways to minimise it

#### **Generic Skills (GS)**

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

- **GS1.** write work-related notes
- **GS2.** read relevant guides and manuals to get updated information
- **GS3.** co-ordinate with co-workers to achieve work objectives
- GS4. communicate politely and professionally
- **GS5.** take quick decisions to deal with workplace emergencies/ accidents
- **GS6.** resolve work-related problems promptly to ensure minimum impact on productivity
- **GS7.** evaluate all possible solutions to a problem to select the best one
- **GS8.** plan and prioritise tasks to ensure timely completion









# **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Clean combine harvester machine	10	15	-	10
<b>PC1.</b> park the combine harvester machine on a flat surface	-	-	-	-
<b>PC2.</b> shut down the combine harvester machine as per the operator's manual instructions	-	-	-	-
PC3. detach appropriate machine parts and attachments as per the SOP	-	-	-	-
<b>PC4.</b> clean dust, straw and any other waste from machine parts and kits attached to the combine harvester	-	-	-	-
Carry out maintenance of various machine parts	15	15	-	15
<b>PC5.</b> inspect the engine, cutting/ crop lifter/ feeder house components for malfunction/ wear and tear/ damage	-	-	-	-
<b>PC6.</b> check all nuts and bolts for the prescribed torque and locking	-	-	-	-
<b>PC7.</b> check that flat belts, v-belts and roller chains have the recommended level of tension and the fanbelt alignment and fuse change as required	-	-	-	-
<b>PC8.</b> check battery for the prescribed voltage and electrolyte level	-	-	-	-
<b>PC9.</b> apply grease or lubricant on the greasing points	-	-	-	-
<b>PC10.</b> replace the engine oil, hydraulic oil, coolant, oil filter, fuel filter, air cleaner as per the maintenance schedule	-	-	-	-
<b>PC11.</b> refill the battery with distilled water as per the requirement	-	-	-	-
PC12. discharge dirty fuel through the drain plug	-	-	<del>-</del>	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC13.</b> repair, adjust or replace the worn-out/malfunctioning/ damaged components as per the SOP	-	-	-	-
<b>PC14.</b> use the manufacturer-approved spare parts, tools and equipment	-	-	-	-
<b>PC15.</b> arrange for technical help from a certified mechanic for complex problems	-	-	-	-
<b>PC16.</b> maintain the record of repair and maintenance activities	-	-	-	-
<b>PC17.</b> schedule the next maintenance as per the maintenance schedule	-	-	-	-
Perform waste management	5	10	-	5
PC18. segregate waste into different categories	-	-	-	-
PC19. dispose non-recyclable waste appropriately	-	-	-	-
<b>PC20.</b> deposit recyclable and reusable material at the identified location	-	-	-	-
<b>PC21.</b> Evaluate and apply techniques to minimize losses during combine operation	-	-	-	-
NOS Total	30	40	-	30









# **National Occupational Standards (NOS) Parameters**

NOS Code	AGR/N1105
NOS Name	Perform scheduled basic maintenance of combine harvester machine
Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Farm Machinery, Equipment Operation and Maintenance
NSQF Level	4
Credits	2
Version	3.0
Last Reviewed Date	26/11/2024
Next Review Date	26/11/2027
NSQC Clearance Date	26/11/2024









### **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:









- **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.









**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









**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









# **Assessment Criteria**

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









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC10.</b> understand the difference between job and career	-	-	-	-
<b>PC11.</b> prepare a career development plan with short- and long-term goals, based on aptitude	-	-	-	-
Communication Skills	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	-	-	-	-
Diversity & Inclusion	1	2	-	-
<b>PC14.</b> 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	2	3	-	-
<b>PC16.</b> select financial institutions, products and services as per requirement	-	-	-	-
<b>PC17.</b> carry out offline and online financial transactions, safely and securely	-	-	-	-
<b>PC18.</b> identify common components of salary and compute income, expenses, taxes, investments etc	-	-	-	-
PC19. identify relevant rights and laws and use legal aids to fight against legal exploitation	-	-	-	-
Essential Digital Skills	3	4	-	-
<b>PC20.</b> operate digital devices and carry out basic internet operations securely and safely	-	-	-	-
<b>PC21.</b> use e- mail and social media platforms and virtual collaboration tools to work effectively	-	-	-	-
<b>PC22.</b> use basic features of word processor, spreadsheets, and presentations	-	-	-	-









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









#### **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	18/02/2025
Next Review Date	18/02/2028
NSQC Clearance Date	18/02/2025

### Assessment Guidelines and Assessment Weightage

#### **Assessment Guidelines**

- 1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) (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: 70









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

# **Assessment Weightage**

### Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
AGR/N1103.Prepare combine harvester machine for operation	30	40	-	30	100	30
AGR/N1104.Operate the combine harvester machine to harvest grain crop	30	40	-	30	100	35
AGR/N1105.Perform scheduled basic maintenance of combine harvester machine	30	40	-	30	100	30
DGT/VSQ/N0102.Employability Skills (60 Hours)	20	30	-	_	50	5
Total	110	150	-	90	350	100









# **Acronyms**

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









# 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.