

## Qualification Pack



# Forklift Operator/Driver

QP Code: ASC/Q9707

Version: 2.0

NSQF Level: 4

Automotive Skills Development Council || 153, GF, Okhla Industrial Area, Phase 3  
New Delhi 110020

## Qualification Pack

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### ASC/Q9707: Forklift Operator/Driver

#### Brief Job Description

The individual is responsible for ensuring the fitness of the forklift for use, driving the forklift, handling delivery, stocking, and shifting of the goods, maintaining safe and healthy working practices and communicating effectively with colleagues, customers, and others.

#### Personal Attributes

The job requires the individual to be polite and remain calm and composed at all times. The incumbent should be able to drive for long and/or awkward hours under tough road conditions.

#### Applicable National Occupational Standards (NOS)

##### Compulsory NOS:

1. [ASC/N9809: Organize work and resources \(Road Transportation\)](#)
2. [ASC/N9808: Interact effectively with colleagues and customers \(Road Transportation\)](#)
3. [ASC/N9704: Drive responsibly and ensure road worthiness of vehicle](#)
4. [ASC/N9712: Ensure fitness of forklift for use](#)
5. [ASC/N9713: Handle delivery, stocking and shifting of the goods](#)
6. [ASC/N9606: Ensure roadworthiness of Electric Vehicle \(EV\)](#)

#### Qualification Pack (QP) Parameters

Sector	Automotive
Sub-Sector	Road Transportation
Occupation	Driving
Country	India
NSQF Level	4
Aligned to NCO/ISCO/ISIC Code	NCO-2015/9122.0301

## Qualification Pack

<b>Minimum Educational Qualification &amp; Experience</b>	8th Class with 4 Years of relevant experience OR 8th Class + 2 year ITI with 2 Years of relevant experience OR Certificate-NSQF (Light Motor Vehicle Level 3) with 2 Years of relevant experience
<b>Minimum Level of Education for Training in School</b>	
<b>Pre-Requisite License or Training</b>	Permanent or Learners LMV licence mandatory as per CMVR act
<b>Minimum Job Entry Age</b>	18 Years
<b>Last Reviewed On</b>	30/09/2021
<b>Next Review Date</b>	30/09/2024
<b>NSQC Approval Date</b>	30/09/2021
<b>Version</b>	2.0
<b>Reference code on NQR</b>	2021/AUT/ASDC/04535
<b>NQR Version</b>	1.0

## Qualification Pack

### ASC/N9809: Organize work and resources (Road Transportation)

#### Description

This NOS unit is about maintaining working environment safe and secure, maintaining health and hygiene and practicing optimizing use of resources as per organizational standards.

#### Scope

The scope covers the following :

- Maintain safe and secure working environment
- Maintain health and hygiene
- Material/energy conservation practices

#### Elements and Performance Criteria

##### *Maintain safe and secure working environment*

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

- PC1. organize work as per the organization's health, safety and security policies and procedures
- PC2. identify the risks and hazards associated while driving and their causes and preventions
- PC3. check and ensure the functioning of vehicle before commencing work
- PC4. identify and report vehicle maintenance and repair requirements/risks as per SOP, if any
- PC5. take corrective measures and follow standard first-aid procedures in case of an accident
- PC6. ensure safety of all passengers and immediately report any breaches to the appropriate authority

##### *Maintain health and hygiene*

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

- PC7. ensure vehicle and equipment are regularly cleaned and sanitized
- PC8. wash hands with soap and use alcohol-based sanitizer regularly
- PC9. avoid contact with ill people and self-isolate in a similar situation
- PC10. wear and dispose of PPEs regularly and appropriately
- PC11. report hygiene and sanitation issues to appropriate authority, if any
- PC12. follow processes specified for disposal of hazardous waste

##### *Material/energy conservation practices*

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

- PC13. identify ways to optimize usage of fuel (Petrol/diesel/CNG) in the vehicle
- PC14. use resources in a responsible manner
- PC15. check for spills/leakages in the vehicle with caution
- PC16. plug spills/leakages of fuel (Petrol/diesel/CNG), oil/coolant or water from the vehicle and escalate to appropriate authority if unable to rectify
- PC17. report malfunctioning (fumes/sparks/emission/vibration/noise) and lapse in maintenance of the vehicle

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PC18. ensure the various equipment of the vehicle is properly connected

### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. organisations procedures for health, safety and security, individual role and responsibilities in this context
- KU2. organizations emergency procedures for different emergency situations and the importance of following the same
- KU3. how and when to report hazards, as well as the limits of responsibility for dealing with hazards
- KU4. potential hazards, risks and threats based on the nature of work
- KU5. efficient utilization of material and water
- KU6. common sources of pollution and ways to minimize it
- KU7. categorisation of waste into dry, wet, recyclable, non-recyclable and items of single-use plastics
- KU8. usage of different colours of dustbins
- KU9. significance of greening
- KU10. organisation's policies to maintain personal health and hygiene at the workplace
- KU11. helpline number related to the women safety
- KU12. standard first-aid procedures
- KU13. appropriate action to be taken in case of accidents, agitations, road block, etc.

### Generic Skills (GS)

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

- GS1. read safety instructions/guidelines
- GS2. modify work practices to improve them
- GS3. ask for clarifications from superior about the job requirement
- GS4. work with supervisors/team members to carry out work related tasks
- GS5. complete tasks efficiently and accurately within the stipulated time
- GS6. inform/report to concerned person in case of any problem
- GS7. make timely decisions for efficient utilization of resources
- GS8. write in at least one language and complete written work with attention to detail
- GS9. be punctual, utilize time and manage workload efficiently

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### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Maintain safe and secure working environment</i>	17	11	-	5
PC1. organize work as per the organization's health, safety and security policies and procedures	3	2	-	1
PC2. identify the risks and hazards associated while driving and their causes and preventions	3	2	-	1
PC3. check and ensure the functioning of vehicle before commencing work	3	2	-	1
PC4. identify and report vehicle maintenance and repair requirements/risks as per SOP, if any	3	2	-	1
PC5. take corrective measures and follow standard first-aid procedures in case of an accident	2	2	-	1
PC6. ensure safety of all passengers and immediately report any breaches to the appropriate authority	3	1	-	-
<i>Maintain health and hygiene</i>	15	11	-	8
PC7. ensure vehicle and equipment are regularly cleaned and sanitized	2	1	-	1
PC8. wash hands with soap and use alcohol-based sanitizer regularly	1	2	-	1
PC9. avoid contact with ill people and self-isolate in a similar situation	3	3	-	1
PC10. wear and dispose of PPEs regularly and appropriately	3	2	-	1
PC11. report hygiene and sanitation issues to appropriate authority, if any	3	1	-	2
PC12. follow processes specified for disposal of hazardous waste	3	2	-	2
<i>Material/energy conservation practices</i>	18	8	-	7
PC13. identify ways to optimize usage of fuel (Petrol/diesel/CNG) in the vehicle	3	2	-	1
PC14. use resources in a responsible manner	2	1	-	1



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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC15. check for spills/leakages in the vehicle with caution	3	1	-	1
PC16. plug spills/leakages of fuel (Petrol/diesel/CNG), oil/coolant or water from the vehicle and escalate to appropriate authority if unable to rectify	4	2	-	2
PC17. report malfunctioning (fumes/sparks/emission/vibration/noise) and lapse in maintenance of the vehicle	3	1	-	1
PC18. ensure the various equipment of the vehicle is properly connected	3	1	-	1
<b>NOS Total</b>	<b>50</b>	<b>30</b>	<b>-</b>	<b>20</b>



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### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	ASC/N9809
<b>NOS Name</b>	Organize work and resources (Road Transportation)
<b>Sector</b>	Automotive
<b>Sub-Sector</b>	Generic
<b>Occupation</b>	Generic
<b>NSQF Level</b>	4
<b>Credits</b>	TBD
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	30/09/2021
<b>Next Review Date</b>	30/09/2024
<b>NSQF Clearance Date</b>	30/09/2021

## Qualification Pack

# ASC/N9808: Interact effectively with colleagues and customers (Road Transportation)

## Description

This NOS unit is about communicating effectively with colleagues and customers of all ages, genders and abilities.

## Scope

The scope covers the following :

- Communicate effectively with colleagues and customer
- Interact with supervisor or superior

## Elements and Performance Criteria

### *Communicate effectively with colleagues and customers*

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

- PC1. greet the customers promptly and appropriately as per the organization's procedure
- PC2. communicate with the customers, colleagues and others in a polite and professional manner
- PC3. address customers dis-satisfactions and complaints effectively, if any
- PC4. work in a manner that shows respect for all customers, colleagues and others
- PC5. ensure the quality of service caters to the specific needs of every individual, across all genders and age groups as per organizational standards
- PC6. adhere to the policies related to the prevention of sexual harassment, both physical and verbal
- PC7. provide assistance to persons with disability, if asked
- PC8. maintain positive and effective relationships with colleagues and customers
- PC9. show respect to the personal space of the others

### *Interact with supervisor or superior*

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

- PC10. identify work requirements basis instructions received from the supervisor
- PC11. escalate problems to superiors that cannot be handled
- PC12. report the completed trips and other data to the supervisor
- PC13. analyse customer/manager feedback and take appropriate action

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. organizational service standards and policies on behavioral etiquette, professionalism and gender sensitive service practices at workplace
- KU2. organizational policy with regards to Persons with disability (PwD)

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- KU3. the importance of effective communication and establishing good working relationships with supervisor and customers
- KU4. different methods of communication as per the circumstances

### Generic Skills (GS)

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

- GS1. read instructions/guidelines/procedures
- GS2. communicate effectively using an appropriate body language/tone
- GS3. ask for clarification and advice from the concerned person
- GS4. maintain positive and effective relationships with colleagues and customers
- GS5. evaluate the possible solution(s) to the problem
- GS6. deliver consistent and reliable service to customers
- GS7. complete written work with attention to detail
- GS8. check that the work meets customer requirements

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### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Communicate effectively with colleagues and customers</i>	37	22	-	16
PC1. greet the customers promptly and appropriately as per the organization's procedure	5	3	-	2
PC2. communicate with the customers, colleagues and others in a polite and professional manner	4	2	-	2
PC3. address customers dis-satisfactions and complaints effectively, if any	4	3	-	2
PC4. work in a manner that shows respect for all customers, colleagues and others	4	3	-	1
PC5. ensure the quality of service caters to the specific needs of every individual, across all genders and age groups as per organizational standards	5	3	-	2
PC6. adhere to the policies related to the prevention of sexual harassment, both physical and verbal	5	3	-	2
PC7. provide assistance to persons with disability, if asked	4	2	-	2
PC8. maintain positive and effective relationships with colleagues and customers	2	1	-	1
PC9. show respect to the personal space of the others	4	2	-	2
<i>Interact with supervisor or superior</i>	13	8	-	4
PC10. identify work requirements basis instructions received from the supervisor	5	2	-	2
PC11. escalate problems to superiors that cannot be handled	3	2	-	1
PC12. report the completed trips and other data to the supervisor	3	3	-	1

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC13. analyse customer/manager feedback and take appropriate action	2	1	-	-
<b>NOS Total</b>	<b>50</b>	<b>30</b>	<b>-</b>	<b>20</b>

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### National Occupational Standards (NOS) Parameters

NOS Code	ASC/N9808
NOS Name	Interact effectively with colleagues and customers (Road Transportation)
Sector	Automotive
Sub-Sector	Generic
Occupation	Generic
NSQF Level	4
Credits	TBD
Version	1.0
Last Reviewed Date	30/09/2021
Next Review Date	30/09/2024
NSQC Clearance Date	30/09/2021

## Qualification Pack

### ASC/N9704: Drive responsibly and ensure road worthiness of vehicle

#### Description

This OS unit is about examining the vehicle, conforming to standard driving practices, following traffic rules and regulations and managing vehicle faults while driving on the route to reach safely and on time.

#### Scope

The scope covers the following :

- Examine the vehicle before the trip
- Drive the LMV conforming to the standard driving practices
- Follow traffic rules and regulation
- Manage vehicle faults

#### Elements and Performance Criteria

##### *Examine the vehicle before the trip*

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

- PC1. inspect and conform the vehicle's condition as per health and safety guidelines before starting the trip
- PC2. ensure the vehicle meets the legal and compliance requirements like pollution test, load limit, etc.
- PC3. perform routine maintenance checks on the vehicle for tyre pressure, fuel (Petrol/diesel/CNG) level, working of headlights and brakes, CNG cylinder valves etc.
- PC4. check vehicle service record for any history of technical defects or immediate need for servicing like oil/filter change, etc.
- PC5. prepare a to-do list for repair requirement, if any
- PC6. record all deviations observed while carrying out checks
- PC7. report actual or potential defects/deviations to the senior driver/owner/service supervisor
- PC8. determine roadworthiness of the vehicle and use another vehicle if the current vehicle is found unfit
- PC9. confirm all gauges and warning lights are functioning properly before moving the vehicle

##### *Drive the LMV conforming to the standard driving practices*

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

- PC10. perform pre-driving activities like shoulder checking, adjusting IRVM/ ORVM and releasing of handbrakes, etc.
- PC11. insert or press the ignition key/button to start the vehicle
- PC12. coordinate gear changes, if any, with appropriate use of clutch/acceleration and steering control
- PC13. maneuver the vehicle safely and responsibly while regulating the speed in all weather and road conditions by coordinating the operation of all controls
- PC14. use the accelerator, steering control and brakes correctly for safe driving, stopping and parking the vehicle



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PC15. ensure maximum fuel (Petrol/diesel/CNG) efficiency while driving

*Follow traffic rules and regulation*

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

PC16. follow guidelines on the road while driving like avoiding excessive honking, driving on high beam, loud music, etc.

PC17. maintain a safe distance from other vehicles

PC18. ensure the vehicle is within the prescribed speed limits at all times and avoid road hog

PC19. ensure proper parking at appropriate spots

PC20. adhere to local and state specific driving laws and traffic regulations, including overloading

PC21. turn off ignition at red lights or after parking the vehicle to enhance fuel efficiency

*Manage vehicle faults*

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

PC22. monitor and respond correctly to gauges, warning lights, CNG leakage etc. while driving

PC23. ensure to stop the vehicle at a safe place in case of any malfunction and turn off the ignition

PC24. carry out a quick diagnostic check

PC25. carry out minor adjustments or temporary repairs like replacement/top-up of oil, change of tyres/wipers, etc. if possible

PC26. report the exact nature of the problem to the supervisor to get appropriate help from the command office

PC27. take the vehicle to the service point for corrective action in case of major defect or accident

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. organization's policies on roadworthiness requirements, basic compliance to technical standards and safety requirements

KU2. quality norms and standards prescribed in the Quality Manual by the organization

KU3. standard check list to examine the vehicle before the trip

KU4. different sections and rules of Motor Vehicle Act, 1988

KU5. CMVR guidelines issued by MoRTH (Ministry of Road Transport & Highways)

KU6. guidelines issued by State Road Transport Authorities like RTOs

KU7. escalation procedure followed in the organization

KU8. basic functionalities of the technical equipment of the vehicle

KU9. safe and fuel-efficient driving techniques

KU10. basic troubleshooting techniques of the vehicle

KU11. latest traffic regulations

KU12. organizational procedure to take the vehicle to the service/repair point for corrective action like parts replacements

## Generic Skills (GS)

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

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- GS1. read safety instructions/guidelines/procedures
- GS2. communicate effectively with the passengers, supervisors and colleagues
- GS3. comply with all rules and regulations
- GS4. write in English/any one language
- GS5. make timely decisions for efficient utilization of resources
- GS6. complete tasks efficiently and accurately within stipulated time

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### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Examine the vehicle before the trip</i>	9	13	-	8
PC1. inspect and conform the vehicle's condition as per health and safety guidelines before starting the trip	1	1	-	1
PC2. ensure the vehicle meets the legal and compliance requirements like pollution test, load limit, etc.	1	2	-	1
PC3. perform routine maintenance checks on the vehicle for tyre pressure, fuel (Petrol/diesel/CNG) level, working of headlights and brakes, CNG cylinder valves etc.	1	3	-	1
PC4. check vehicle service record for any history of technical defects or immediate need for servicing like oil/filter change, etc.	1	1	-	1
PC5. prepare a to-do list for repair requirement, if any	1	1	-	1
PC6. record all deviations observed while carrying out checks	1	1	-	1
PC7. report actual or potential defects/deviations to the senior driver/owner/service supervisor	1	1	-	1
PC8. determine roadworthiness of the vehicle and use another vehicle if the current vehicle is found unfit	1	2	-	-
PC9. confirm all gauges and warning lights are functioning properly before moving the vehicle	1	1	-	1
<i>Drive the LMV conforming to the standard driving practices</i>	8	13	-	6
PC10. perform pre-driving activities like shoulder checking, adjusting IRVM/ ORVM and releasing of handbrakes, etc.	1	1	-	1
PC11. insert or press the ignition key/button to start the vehicle	2	3	-	1

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. coordinate gear changes, if any, with appropriate use of clutch/acceleration and steering control	1	2	-	1
PC13. maneuver the vehicle safely and responsibly while regulating the speed in all weather and road conditions by coordinating the operation of all controls	2	3	-	1
PC14. use the accelerator, steering control and brakes correctly for safe driving, stopping and parking the vehicle	1	2	-	1
PC15. ensure maximum fuel (Petrol/diesel/CNG) efficiency while driving	1	2	-	1
<i>Follow traffic rules and regulation</i>	<b>7</b>	<b>14</b>	-	<b>3</b>
PC16. follow guidelines on the road while driving like avoiding excessive honking, driving on high beam, loud music, etc.	1	2	-	-
PC17. maintain a safe distance from other vehicles	2	3	-	1
PC18. ensure the vehicle is within the prescribed speed limits at all times and avoid rod hog	1	2	-	-
PC19. ensure proper parking at appropriate spots	1	2	-	1
PC20. adhere to local and state specific driving laws and traffic regulations, including overloading	1	3	-	1
PC21. turn off ignition at red lights or after parking the vehicle to enhance fuel efficiency	1	2	-	-
<i>Manage vehicle faults</i>	<b>6</b>	<b>10</b>	-	<b>3</b>
PC22. monitor and respond correctly to gauges, warning lights, CNG leakage etc. while driving	2	1	-	-
PC23. ensure to stop the vehicle at a safe place in case of any malfunction and turn off the ignition	1	2	-	1
PC24. carry out a quick diagnostic check	-	2	-	1
PC25. carry out minor adjustments or temporary repairs like replacement/top-up of oil, change of tyres/wipers, etc. if possible	1	1	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC26. report the exact nature of the problem to the supervisor to get appropriate help from the command office	1	2	-	1
PC27. take the vehicle to the service point for corrective action in case of major defect or accident	1	2	-	-
<b>NOS Total</b>	<b>30</b>	<b>50</b>	<b>-</b>	<b>20</b>

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### National Occupational Standards (NOS) Parameters

NOS Code	ASC/N9704
NOS Name	Drive responsibly and ensure road worthiness of vehicle
Sector	Automotive
Sub-Sector	Road Transportation
Occupation	Driving
NSQF Level	4
Credits	TBD
Version	2.0
Last Reviewed Date	30/09/2021
Next Review Date	30/09/2024
NSQC Clearance Date	30/09/2021

## Qualification Pack

### ASC/N9712: Ensure fitness of forklift for use

#### Description

This OS unit is about performing pre-drive inspection and operational checks on the forklift as per operational standards.

#### Scope

The scope covers the following :

- Conduct pre-drive inspection and checks
- Perform basic operational check before the start of work

#### Elements and Performance Criteria

##### *Conduct pre-drive inspection and checks*

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

- PC1. check the forklift for engine oil level, fuel level, radiator water level (LPG, gas and diesel forklifts)
- PC2. inspect the battery area visually for spillage and corrosion on terminals/battery tray and ensure the battery plug connections are not loose, terminals are greased, and voltage and vent caps are not clogged (battery operated FLT's)
- PC3. check all the cables for exposed wires
- PC4. monitor the electrolyte levels in cells and hold-downs or brackets to keep the battery securely in a place
- PC5. make sure guards, chains, or hydraulic hose reels are not damaged and bolts/ nuts are intact
- PC6. check wheels and tyres for wear, damage, and air pressure (in case of pneumatic tyres)
- PC7. ensure forks are not bent, no cracks are present, positioning latches are in good working condition, and carriage teeth are not broken, chipped, or worn
- PC8. make sure the overhead cage is in good condition and does not have any cracks, bend, etc.
- PC9. ensure the horn is working and loud enough to be heard in the working environment and other warning devices are operational
- PC10. check headlights and warning lights for proper functioning

##### *Perform basic operational check before the start of work*

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

- PC11. ensure that the pedal of the foot break holds and the unit stops smoothly
- PC12. make sure the parking brake holds against slight acceleration
- PC13. confirm that the seat brake holds when operator rises from the seat
- PC14. make sure the clutch and gearshift shift smoothly with no jumping or jerking
- PC15. check dash control panel for proper functioning of all lights and gauges
- PC16. examine the emergency switch for proper functioning (if available),
- PC17. make sure the steering and lift and tilt mechanism works smoothly examine cylinders and hoses should for leakage



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- PC18. examine cylinders and hoses for any leakage
- PC19. ensure the mast tilts forward and backward correctly and also extends
- PC20. make sure forklift preventive maintenance schedules are followed as per standard guidelines

### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. organization's policies on roadworthiness requirements, basic compliance to technical standards and safety requirements
- KU2. quality norms and standards prescribed in the Quality Manual by the organization
- KU3. standard check list to examine the vehicle before the trip
- KU4. different sections and rules of Motor Vehicle Act, 1988
- KU5. CMVR guidelines issued by MoRTH (Ministry of Road Transport & Highways)
- KU6. guidelines issued by State Road Transport Authorities like RTOs
- KU7. escalation procedure followed in the organization
- KU8. safe and fuel-efficient driving techniques
- KU9. basic troubleshooting techniques of the vehicle
- KU10. latest traffic regulations
- KU11. organizational procedure to take the vehicle to the service/repair point for corrective action like parts replacements

### Generic Skills (GS)

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

- GS1. read safety instructions/guidelines/procedures
- GS2. communicate effectively with the passengers, supervisors and colleagues
- GS3. comply with all rules and regulations
- GS4. write in English/any one language
- GS5. make timely decisions for efficient utilization of resources
- GS6. complete tasks efficiently and accurately within stipulated time

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### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Conduct pre-drive inspection and checks</i>	21	24	-	10
PC1. check the forklift for engine oil level, fuel level, radiator water level (LPG, gas and diesel forklifts)	2	3	-	1
PC2. inspect the battery area visually for spillage and corrosion on terminals/battery tray and ensure the battery plug connections are not loose, terminals are greased, and voltage and vent caps are not clogged (battery operated FLT's)	2	3	-	1
PC3. check all the cables for exposed wires	2	2	-	1
PC4. monitor the electrolyte levels in cells and hold-downs or brackets to keep the battery securely in a place	3	3	-	1
PC5. make sure guards, chains, or hydraulic hose reels are not damaged and bolts/ nuts are intact	2	2	-	1
PC6. check wheels and tyres for wear, damage, and air pressure (in case of pneumatic tyres)	2	2	-	1
PC7. ensure forks are not bent, no cracks are present, positioning latches are in good working condition, and carriage teeth are not broken, chipped, or worn	2	3	-	1
PC8. make sure the overhead cage is in good condition and does not have any cracks, bend, etc.	2	3	-	1
PC9. ensure the horn is working and loud enough to be heard in the working environment and other warning devices are operational	2	1	-	1
PC10. check headlights and warning lights for proper functioning	2	2	-	1
<i>Perform basic operational check before the start of work</i>	9	26	-	10
PC11. ensure that the pedal of the foot break holds and the unit stops smoothly	-	3	-	1

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. make sure the parking brake holds against slight acceleration	-	3	-	1
PC13. confirm that the seat brake holds when operator rises from the seat	-	3	-	1
PC14. make sure the clutch and gearshift shift smoothly with no jumping or jerking	-	2	-	1
PC15. check dash control panel for proper functioning of all lights and gauges	1	3	-	2
PC16. examine the emergency switch for proper functioning (if available),	2	3	-	1
PC17. make sure the steering and lift and tilt mechanism works smoothly examine cylinders and hoses should for leakage	-	2	-	1
PC18. examine cylinders and hoses for any leakage	-	2	-	-
PC19. ensure the mast tilts forward and backward correctly and also extends	3	2	-	1
PC20. make sure forklift preventive maintenance schedules are followed as per standard guidelines	3	3	-	1
<b>NOS Total</b>	<b>30</b>	<b>50</b>	<b>-</b>	<b>20</b>

## Qualification Pack

### National Occupational Standards (NOS) Parameters

NOS Code	ASC/N9712
NOS Name	Ensure fitness of forklift for use
Sector	Automotive
Sub-Sector	Road Transportation
Occupation	Driving
NSQF Level	4
Credits	TBD
Version	2.0
Last Reviewed Date	30/09/2021
Next Review Date	30/09/2024
NSQC Clearance Date	30/09/2021

## Qualification Pack

### ASC/N9713: Handle delivery, stocking and shifting of the goods

#### Description

This OS unit is about driving the forklift, lifting and moving the material to the desired location and parking the forklift as per the standards

#### Scope

The scope covers the following :

- Start the forklift
- Lift the material
- Move the material on forklift
- Park the forklift after daily operations
- Park the forklift for long durations

#### Elements and Performance Criteria

##### *Start the forklift*

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

- PC1. fasten the seatbelt and wear other PPE like hard hat as per OSHA (Occupation Safety and Health Act)
- PC2. check the parking brake for engagement
- PC3. confirm that the transmission control lever is in a neutral position, safety locks are on (if fitted) and all attachment controls are in the neutral position
- PC4. make sure that the throttle control or accelerator pedal is pushed past any constriction that may be fitted and is in the low idle position
- PC5. start the engine as per specified instructions
- PC6. cool down the starter or pre-heat the vehicle as required, if engine fails to start within approximately 10 seconds
- PC7. check all gauges for correct operation
- PC8. allow the engine and components to warm up to operating temperature (for approximately 5 minutes) before the operation
- PC9. check all attachment controls for their correct operation, unusual noises and any vibrations after starting the forklift
- PC10. ensure that the area is clear and it is safe to move the forklift

##### *Lift the material*

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

- PC11. drive the forklift near the storage location where the material is kept
- PC12. lower the forks while keeping the mast in upright condition if load is kept on ground or take it to the level of load
- PC13. align the fork before inserting it into the pallet
- PC14. insert the fork all the way under the material

## Qualification Pack

PC15. adjust the fork as wide as possible to fit the load and to provide a more even distribution of weight

PC16. ensure the load is within specified limits of forklift

PC17. make sure that the material on pallets is stable, neat, cross-tied and evenly distributed

### *Move the material on forklift*

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

PC18. tilt loads backward or as specified for load

PC19. travel with forks as low as possible from the floor and tilted back

PC20. match speed of driving with load and workplace conditions

PC21. drive to the designated location through the specified aisles/bin/location as per safety norms

PC22. make sure not to meet with any obstacles as in the unladen condition the FLT balance in rear might be heavy

PC23. rest the pallet on ground/bin base and slowly start removing forks out of the pallet as per instructions

PC24. ensure that the material is not damaged while unloading

### *Park the forklift after daily operations*

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

PC25. park the forklift in the parking area with the forks and attachments (if any) touching the ground after unloading the material

PC26. place all attachment control levers in the neutral or hold position

PC27. tighten all lift chains as they may jump clear of the top carrier rollers

PC28. place the transmission and forward-reverse levers into the neutral position and apply safety locks and brakes

PC29. turn off the fuel isolating valve, in case of an LPG powered forklift

PC30. switch off the ignition

PC31. decrease the inner pressure by operating the lift & tilting lever several times

PC32. take out the key & hand it over to concerned person as per the organizational policy

### *Park the forklift for long durations*

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

PC33. park the forklift in the shade or location specified for long duration parking

PC34. take out the plug to prevent discharge of batteries (both electric or other fuel)

PC35. apply anti-rust on exposed parts like piston rod

PC36. add oil/grease to all the lubrication points, as required

PC37. operate forklift once in a week with forks lifted till its maximum height

PC38. check battery once a month if it is parked for months

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. organization's policies on roadworthiness requirements, basic compliance to technical standards and safety requirements

## Qualification Pack

- KU2. standard check list to examine the vehicle before the trip
- KU3. OSHA and other safety standards
- KU4. CMVR guidelines issued by MoRTH (Ministry of Road Transport & Highways)
- KU5. quality norms and standards prescribed in the Quality Manual by the organization
- KU6. different sections and rules of Motor Vehicle Act, 1988
- KU7. guidelines issued by State Road Transport Authorities like RTOs
- KU8. escalation procedure followed in the organization
- KU9. safe and fuel-efficient driving techniques
- KU10. basic troubleshooting techniques of the vehicle
- KU11. latest traffic regulations
- KU12. organizational procedure to take the vehicle to the service/repair point for corrective action like parts replacements
- KU13. escalation procedure followed in the organization

## Generic Skills (GS)

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

- GS1. read safety instructions/guidelines/procedures
- GS2. communicate effectively with the passengers, supervisors and colleagues
- GS3. comply with all rules and regulations
- GS4. write in English/any one language
- GS5. make timely decisions for efficient utilization of resources
- GS6. complete tasks efficiently and accurately within stipulated time



## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Start the forklift</i>	7	14	-	5
PC1. fasten the seatbelt and wear other PPE like hard hat as per OSHA (Occupation Safety and Health Act)	-	1	-	-
PC2. check the parking brake for engagement	-	1	-	1
PC3. confirm that the transmission control lever is in a neutral position, safety locks are on (if fitted) and all attachment controls are in the neutral position	-	2	-	1
PC4. make sure that the throttle control or accelerator pedal is pushed past any constriction that may be fitted and is in the low idle position	1	1	-	-
PC5. start the engine as per specified instructions	2	2	-	1
PC6. cool down the starter or pre-heat the vehicle as required, if engine fails to start within approximately 10 seconds	1	1	-	-
PC7. check all gauges for correct operation	1	2	-	1
PC8. allow the engine and components to warm up to operating temperature (for approximately 5 minutes) before the operation	-	1	-	-
PC9. check all attachment controls for their correct operation, unusual noises and any vibrations after starting the forklift	1	1	-	-
PC10. ensure that the area is clear and it is safe to move the forklift	1	2	-	1
<i>Lift the material</i>	6	10	-	3
PC11. drive the forklift near the storage location where the material is kept	-	1	-	-
PC12. lower the forks while keeping the mast in upright condition if load is kept on ground or take it to the level of load	2	1	-	1

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC13. align the fork before inserting it into the pallet	-	1	-	1
PC14. insert the fork all the way under the material	-	1	-	-
PC15. adjust the fork as wide as possible to fit the load and to provide a more even distribution of weight	-	2	-	1
PC16. ensure the load is within specified limits of forklift	2	2	-	-
PC17. make sure that the material on pallets is stable, neat, cross-tied and evenly distributed	2	2	-	-
<i>Move the material on forklift</i>	6	10	-	2
PC18. tilt loads backward or as specified for load	-	1	-	-
PC19. travel with forks as low as possible from the floor and tilted back	-	1	-	-
PC20. match speed of driving with load and workplace conditions	2	2	-	1
PC21. drive to the designated location through the specified aisles/bin/location as per safety norms	2	2	-	-
PC22. make sure not to meet with any obstacles as in the unladen condition the FLT balance in rear might be heavy	1	1	-	-
PC23. rest the pallet on ground/bin base and slowly start removing forks out of the pallet as per instructions	1	1	-	-
PC24. ensure that the material is not damaged while unloading	-	2	-	1
<i>Park the forklift after daily operations</i>	5	9	-	7
PC25. park the forklift in the parking area with the forks and attachments (if any) touching the ground after unloading the material	-	2	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC26. place all attachment control levers in the neutral or hold position	2	1	-	1
PC27. tighten all lift chains as they may jump clear of the top carrier rollers	1	1	-	2
PC28. place the transmission and forward-reverse levers into the neutral position and apply safety locks and brakes	1	1	-	1
PC29. turn off the fuel isolating valve, in case of an LPG powered forklift	1	1	-	-
PC30. switch off the ignition	-	1	-	1
PC31. decrease the inner pressure by operating the lift & tilting lever several times	-	1	-	2
PC32. take out the key & hand it over to concerned person as per the organizational policy	-	1	-	-
<i>Park the forklift for long durations</i>	<b>6</b>	<b>7</b>	-	<b>3</b>
PC33. park the forklift in the shade or location specified for long duration parking	-	1	-	-
PC34. take out the plug to prevent discharge of batteries (both electric or other fuel)	2	2	-	3
PC35. apply anti-rust on exposed parts like piston rod	1	1	-	-
PC36. add oil/grease to all the lubrication points, as required	2	1	-	-
PC37. operate forklift once in a week with forks lifted till its maximum height	-	1	-	-
PC38. check battery once a month if it is parked for months	1	1	-	-
<b>NOS Total</b>	<b>30</b>	<b>50</b>	-	<b>20</b>

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	ASC/N9713
<b>NOS Name</b>	Handle delivery, stocking and shifting of the goods
<b>Sector</b>	Automotive
<b>Sub-Sector</b>	Road Transportation
<b>Occupation</b>	Driving
<b>NSQF Level</b>	4
<b>Credits</b>	TBD
<b>Version</b>	2.0
<b>Last Reviewed Date</b>	30/09/2021
<b>Next Review Date</b>	30/09/2024
<b>NSQC Clearance Date</b>	30/09/2021

## Qualification Pack

### ASC/N9606: Ensure roadworthiness of Electric Vehicle (EV)

#### Description

This NOS unit is about ensuring the roadworthiness of Electric vehicles before the trip and follow the relevant guidelines.

#### Scope

The scope covers the following :

- Ensure roadworthiness of Electric Vehicle
- Follow CMVR and State guidelines

#### Elements and Performance Criteria

##### *Ensure roadworthiness of Electric Vehicle*

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

- PC1. identify the basics of driving an Electric Vehicle as against an Internal Combustion (IC) Engine
- PC2. ensure the availability of tools required for the basic maintenance of the EV as mentioned in the Work Instructions/SOPs
- PC3. ensure optimum charging in Electric Vehicle
- PC4. apply the OEM's Standard Operating Procedures (SOP) to identify the basic electrical/electronic faults
- PC5. identify maximum level of vehicle battery charging and different charging sockets
- PC6. identify dashboard's signs, signals, sensors, switches, gauges, Human Machine Interface (HMI) & Electronic Instrument Cluster (EIC)
- PC7. complete required statutory documents relevant to safety
- PC8. inform to concerned person in case of any problem

##### *CMVR and state guidelines*

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

- PC9. follow CMVR (Central Motor Vehicle Rules) guidelines issued by MoRTH (Ministry of Road Transport & Highways)
- PC10. follow guidelines issued by RTOs and safety guidelines for EV issued by relevant authorities

#### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. basic functionalities and driving techniques of the Electric Vehicle
- KU2. CMVR guidelines issued by MoRTH
- KU3. guidelines issued by RTOs and safety guidelines for EV issued by relevant authorities
- KU4. quality norms and standards prescribed in the Instructional Manual or SOP

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- KU5. types of charging connector and time required for a full charge using either fast or slow chargers
- KU6. various type of batteries used in the EV and their maintenance procedures
- KU7. different functions related to battery
- KU8. usage of lights, ignition, electronic and air-conditioning systems etc. at various stages of battery
- KU9. related electronic systems including active and passive safety systems specific to EV
- KU10. different type of tools used to diagnose technical faults
- KU11. standard symbols and singages used in the EV

## Generic Skills (GS)

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

- GS1. read safety instructions/guidelines
- GS2. complete tasks efficiently and accurately within stipulated time
- GS3. make timely decisions for efficient utilization of resources
- GS4. write in English/any one language

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Ensure roadworthiness of Electric Vehicle</i>	24	40	-	15
PC1. identify the basics of driving an Electric Vehicle as against an Internal Combustion (IC) Engine	3	6	-	2
PC2. ensure the availability of tools required for the basic maintenance of the EV as mentioned in the Work Instructions/SOPs	3	5	-	2
PC3. ensure optimum charging in Electric Vehicle	3	5	-	2
PC4. apply the OEM's Standard Operating Procedures (SOP) to identify the basic electrical/electronic faults	3	5	-	2
PC5. identify maximum level of vehicle battery charging and different charging sockets	3	4	-	2
PC6. identify dashboard's signs, signals, sensors, switches, gauges, Human Machine Interface (HMI) & Electronic Instrument Cluster (EIC)	3	5	-	2
PC7. complete required statutory documents relevant to safety	4	5	-	2
PC8. inform to concerned person in case of any problem	2	5	-	1
<i>CMVR and state guidelines</i>	6	10	-	5
PC9. follow CMVR (Central Motor Vehicle Rules) guidelines issued by MoRTH (Ministry of Road Transport & Highways)	3	5	-	3
PC10. follow guidelines issued by RTOs and safety guidelines for EV issued by relevant authorities	3	5	-	2
<b>NOS Total</b>	<b>30</b>	<b>50</b>	<b>-</b>	<b>20</b>

## Qualification Pack

### National Occupational Standards (NOS) Parameters

NOS Code	ASC/N9606
NOS Name	Ensure roadworthiness of Electric Vehicle (EV)
Sector	Automotive
Sub-Sector	Road Transportation
Occupation	Driving
NSQF Level	4
Credits	TBD
Version	1.0
Last Reviewed Date	30/09/2021
Next Review Date	30/09/2024
NSQC Clearance Date	30/09/2021

## Assessment Guidelines and Assessment Weightage

### Assessment Guidelines

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down the proportion of marks for Theory and Skills Practical for each PC.
2. The assessment for the theory part will be based on the knowledge bank of questions created by the SSC.
3. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/option NOS/set of NOS.
4. Individual assessment agencies will create unique question papers for the theory part for each candidate at each examination/training center (as per assessment criteria below).
5. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training center based on these criteria.
6. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack.
7. Assessment conducted only after permanent driving license.



## 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
ASC/N9809.Organize work and resources (Road Transportation)	50	30	-	20	100	10
ASC/N9808.Interact effectively with colleagues and customers (Road Transportation)	50	30	-	20	100	15
ASC/N9704.Drive responsibly and ensure road worthiness of vehicle	30	50	-	20	100	20
ASC/N9712.Ensure fitness of forklift for use	30	50	-	20	100	20
ASC/N9713.Handle delivery, stocking and shifting of the goods	30	50	-	20	100	20
ASC/N9606.Ensure roadworthiness of Electric Vehicle (EV)	30	50	-	20	100	15
<b>Total</b>	<b>220</b>	<b>260</b>	<b>-</b>	<b>120</b>	<b>600</b>	<b>100</b>

## Qualification Pack

### Acronyms

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training
ORVM	Outside Rear View Mirror
GPS	Global Positioning System
CMVR	Central Motor Vehicles Rules
RTO	Regional Transport Authority
MORTH	Ministry of Road Transport & Highways
RTO	Regional Transport Office
CMVR	Central Motor Vehicles Rules
HMI	Human Machine Interface
EIC	Electronic Instrument Cluster

## Qualification Pack

### Glossary

<b>Sector</b>	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.
<b>Sub-sector</b>	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
<b>Occupation</b>	Occupation is a set of job roles, which perform similar/ related set of functions in an industry.
<b>Job role</b>	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
<b>Occupational Standards (OS)</b>	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.
<b>Performance Criteria (PC)</b>	Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
<b>National Occupational Standards (NOS)</b>	NOS are occupational standards which apply uniquely in the Indian context.
<b>Qualifications Pack (QP)</b>	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.
<b>Unit Code</b>	Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'
<b>Unit Title</b>	Unit title gives a clear overall statement about what the incumbent should be able to do.
<b>Description</b>	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.
<b>Scope</b>	Scope is a set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on quality of performance required.

## Qualification Pack

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