









Helper Electrician

QP Code: CON/Q0601

Version: 4.0

NSQF Level: 2

Construction Skill Development Council of India || CPB 103 & 104 (1st Floor), Block 4B, DLF Corporate
Park, Phase III, MG Road
Gurgaon-122002 || email:standards@csdcindia.org









Contents

CON/Q0601: Helper Electrician	3
Brief Job Description	3
Applicable National Occupational Standards (NOS)	
Compulsory NOS	3
Qualification Pack (QP) Parameters	
CON/N0606: Handle different tools, measuring devices and materials relevant to LV (low	voltage)
electrical works	5
CON/N0607: Carry out wall chasing and external threading on MS(mild steel) conduit	10
CON/N0101: Erect and dismantle temporary scaffold up to 3.6 meter height	16
CON/N9001: Work according to personal health, safety and environment protocols at con	struction site
	20
CON/N8001: Work effectively in a team to deliver desired results at the workplace	26
DGT/VSQ/N0101: Employability Skills (30 Hours)	30
Assessment Guidelines and Weightage	35
Assessment Guidelines	
Assessment Weightage	36
Acronyms	38
Glossary	41









CON/Q0601: Helper Electrician

Brief Job Description

A Helper Electrician is responsible for helping the construction electrician and performing tasks under instructions and supervision. The responsibilities also include performing preparatory works before temporary and permanent electrical installations and handling tools, devices, and materials used to perform electrical works.

Personal Attributes

This individual should be physically fit to work in varying locations and conditions. The individual should be team-oriented and safety-driven, with basic communication skills.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

- 1. <u>CON/N0606</u>: Handle different tools, measuring devices and materials relevant to LV (low voltage) electrical works
- 2. CON/N0607: Carry out wall chasing and external threading on MS(mild steel) conduit
- 3. CON/N0101: Erect and dismantle temporary scaffold up to 3.6 meter height
- 4. <u>CON/N9001</u>: Work according to personal health, safety and environment protocols at construction site
- 5. CON/N8001: Work effectively in a team to deliver desired results at the workplace
- 6. DGT/VSQ/N0101: Employability Skills (30 Hours)

Qualification Pack (QP) Parameters

Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Construction Electrical Works
Country	India
NSQF Level	2









Credits	9
Aligned to NCO/ISCO/ISIC Code	NCO-2015/9313.0501
Minimum Educational Qualification & Experience	No formal education prescribed OR Ability to read and write
Minimum Level of Education for Training in School	Not Applicable
Pre-Requisite License or Training	NIL
Minimum Job Entry Age	18 Years
Last Reviewed On	NA
Next Review Date	30/04/2028
NSQC Approval Date	08/05/2025
Version	4.0
Reference code on NQR	QG-02-CO-03950-2025-V2-CSDCI
NQR Version	4.0









CON/N0606: Handle different tools, measuring devices and materials relevant to LV (low voltage) electrical works

Description

This unit describes the skills and knowledge required to identify and handle different tools, measuring devices, and materials relevant to LV electrical works

Scope

The scope covers the following:

- Handle tools, accessories, and electrical devices.
- Handle and shift material and fixtures relevant to LV electrical works.

Elements and Performance Criteria

Handle tools, accessories and electrical devices

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

- **PC1.** use different hand tools like screw driver, pliers, wire strippers, voltage testers, insulation tapes, hacksaw and other tools relevant to LV(low voltage) electrical works
- **PC2.** use power tools like drill machine, hand cutting machine, hand grinding machine required to carry out LV electrical installation work
- **PC3.** use measuring tape, plumb bob, spirit level, line thread and other relevant hand tools for carrying out checks in alignment of works
- **PC4.** handle common electrical measuring devices like multimeter, earth tester, tong tester and megger required to undertake LV electrical tests/ inspections
- **PC5.** handle common construction equipments like steel cutting & bending machine, welding machine, vibrators, pumps, motors, tower cranes, batching plants etc
- **PC6.** identify Lock Out Tag Out (LOTO) -shutdown requirements at construction sites

Handle and shift material and fixtures relevant to LV electrical works

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

- **PC7.** select electrical materials and fixtures like wires, cables, conduits, clamps, lights, miniature circuit breakers, switches, sockets, starters and related accessories
- **PC8.** check for breakages, cracks, dampness, corrosions etc. in the electrical materials and fixtures prior to use
- **PC9.** shift lights, cables, conduits, cable trays, brackets, DBs, ladders and other relevant materials to the appropriate work locations as per directions
- **PC10.** inspect material storage location on-site for safe storage condition which includes avoiding vicinity of water, fire, direct sunlight, service lines, existing electrical lines and ongoing construction works etc.
- **PC11.** store and stack electrical materials at work locations as per instructions/standard practices
- **PC12.** provide protective cover, erect barricades, signages around the stacked materials adequately as per instructions
- **PC13.** carry out housekeeping at work locations before and after completion of work









Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** general and electrical safety rules applicable to different activities at construction works
- **KU2.** safety rules and regulations for handling and storing required tools, equipment, and materials
- **KU3.** service request procedures for tools, materials and equipment as per organizational norms
- **KU4.** importance of personal protection including the use of related safety gears & equipment in accordance with organizational norms
- **KU5.** area of use of common electrical hand and power tools like screw drivers, wire strippers, pliers, hammers, hacksaws, chisels, spanners, wrenches etc.
- **KU6.** use of measuring devices like ammeter, earth tester, tong tester, megger, etc.
- **KU7.** various types of cables, wires, conduits and their use in LV electrical connections
- **KU8.** common types of fixtures like switches, brackets, sockets, plugs, tops and their use
- **KU9.** types of circuit breakers, starters, relays and their area of application
- **KU10.** physical and chemical properties of materials that are good conductors, semi-conductors, and bad conductors
- **KU11.** concept of electrical current flow and factors which influence electrical flow through conductors
- **KU12.** use of appropriate fire safety equipment like sand bucket, fire extinguisher,goggles, gloves etc. as per requirement
- **KU13.** use of measuring equipment like measuring tape, plumb bob, level tube/pipe, marking tools, etc. and their respective area of use

Generic Skills (GS)

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

- **GS1.** write in one or more languages, preferably in the local language of the site
- **GS2.** read work and safety-related instructions/signboards, etc. in one or more languages, preferably in the local language of the site
- **GS3.** speak in one or more languages, preferably in one of the local language of the site
- **GS4.** listen attentively to instructions communicated by supervisors
- **GS5.** communicate orally and efficiently with team members
- **GS6.** analyze the safety aspect of the workplace
- **GS7.** plan work to achieve productivity as per the direction /close supervision of superiors
- **GS8.** ensure work is done within time and as per desired quality based on instructions provided by superiors
- **GS9.** identify any violation of safety norms during the work









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Handle tools, accessories and electrical devices	10	30	-	-
PC1. use different hand tools like screw driver, pliers, wire strippers, voltage testers, insulation tapes, hacksaw and other tools relevant to LV(low voltage) electrical works	-	-	-	-
PC2. use power tools like drill machine, hand cutting machine, hand grinding machine required to carry out LV electrical installation work	-	-	-	-
PC3. use measuring tape, plumb bob, spirit level, line thread and other relevant hand tools for carrying out checks in alignment of works	-	-	-	-
PC4. handle common electrical measuring devices like multimeter, earth tester, tong tester and megger required to undertake LV electrical tests/inspections	-	-	-	-
PC5. handle common construction equipments like steel cutting & bending machine, welding machine, vibrators, pumps, motors, tower cranes, batching plants etc	-	-	-	-
PC6. identify Lock Out Tag Out (LOTO) -shutdown requirements at construction sites	-	-	-	-
Handle and shift material and fixtures relevant to LV electrical works	20	40	-	-
PC7. select electrical materials and fixtures like wires, cables, conduits, clamps, lights, miniature circuit breakers, switches, sockets, starters and related accessories	-	-	-	-
PC8. check for breakages, cracks, dampness, corrosions etc. in the electrical materials and fixtures prior to use	-	-	-	-
PC9. shift lights, cables, conduits, cable trays, brackets, DBs, ladders and other relevant materials to the appropriate work locations as per directions	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC10. inspect material storage location on-site for safe storage condition which includes avoiding vicinity of water, fire, direct sunlight, service lines, existing electrical lines and ongoing construction works etc.	-	-	-	-
PC11. store and stack electrical materials at work locations as per instructions/standard practices	-	-	-	-
PC12. provide protective cover, erect barricades, signages around the stacked materials adequately as per instructions	-	-	-	-
PC13. carry out housekeeping at work locations before and after completion of work	-	-	-	-
NOS Total	30	70	-	-









National Occupational Standards (NOS) Parameters

NOS Code	CON/N0606
NOS Name	Handle different tools, measuring devices and materials relevant to LV (low voltage) electrical works
Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Construction Electrical Works
NSQF Level	2
Credits	2
Version	4.0
Last Reviewed Date	08/05/2025
Next Review Date	30/04/2028
NSQC Clearance Date	08/05/2025









CON/N0607: Carry out wall chasing and external threading on MS(mild steel) conduit

Description

This unit describes the skills and the knowledge required to carry out wall chasing and external threading on MS conduit

Scope

The scope covers the following:

- Carry out preparatory work prior to concealed wiring work
- Chase wall as per marking and assist in conduit laying as per instructions
- Carry out external threading on MS conduit

Elements and Performance Criteria

Carry out preparatory work prior to concealed wiring work

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

- **PC1.** arrange and stack the required hand and power tools at the identified job location
- **PC2.** arrange and stack electrical materials such as cables, wires, conduits and fixtures required for wall chasing and LV(Low Voltage) wiring work
- **PC3.** carry out measurement and marking on wall surface using appropriate tools as per instruction
- **PC4.** check the working condition of tools and materials and perform the required basic maintenance

Chase wall as per marking and assist in conduit laying as per instructions

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

- **PC5.** use appropriate PPE for carrying out chasing activity
- **PC6.** carry out firm cutting on wall surface using wall chasing machine as per marking while maintaining uniform depth
- **PC7.** finish the wall chasing work using hand tools as per standard practice maintaining the required dimension
- **PC8.** measure, mark and cut cables and conduits as per instruction using appropriate tools
- **PC9.** bend and join conduits as per requirement using appropriate tools
- **PC10.** assist in placing conduits and cables/ wires and trough the same for permanent LV wiring works
- PC11. clean the work locations after completion of work and dispose debris to appropriate location
- **PC12.** assist senior in laying cables such as power and communication cables as per instructions

Carry out external threading on MS(mild steel) conduit

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

- PC13. carry out measurement & marking on the MS conduits
- **PC14.** hold the conduit in pipe vice as per standard practice









- **PC15.** cut the conduit at marking point and carry out the edge finishing using appropriate tools
- **PC16.** fix die cutter in die stock per instructions and use lubricants as per applicability
- **PC17.** carry out the threading activity following the applicable trade safety norms
- **PC18.** maintain standard housekeeping practice at the workplace

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** general and electrical safety rules applicable to different activities at construction works
- **KU2.** standard organizational practices followed for the electrical works
- **KU3.** safety rules and regulations for handling and storing required relevant tools, equipment, and materials
- **KU4.** service request procedures for tools, materials and equipment as per organizational norms
- **KU5.** hand tools to be used in wall chasing work like chisel, hammer, nails etc.
- **KU6.** power tools to be used in wall chasing works like wall chasing machine, drill machine, cutting saws etc.
- **KU7.** hand tools/ instruments used for marking and measurement prior to carrying out chasing activity
- KU8. hand tools such as hacksaws, files, hand cutting machine etc. used for cutting conduits
- **KU9.** how to operate hand cutting machine and hand drill machine and the PPEs required while operating these machines
- **KU10.** depth of chasing as per the wall thickness and diameter of the conduit
- **KU11.** how to operate vice or threading tool
- **KU12.** basics of electrical charge, current flow and their types
- **KU13.** concept of conductors and semiconductors including their physical properties
- **KU14.** parameters involved in electrical circuits such as voltage, electrical current flow, resistance, heat etc. their signs, units, and conversions
- **KU15.** electrical elements that have thermal influences on circuits
- **KU16.** safe procedure of termination and joining of cables
- KU17. hazards and risks involved in LV electrical works and standard safety norms to be followed

Generic Skills (GS)

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

- **GS1.** write in one or more languages, preferably in the local language of the site
- **GS2.** read work and safety-related instructions/signboards, etc. in one or more languages, preferably in the local language of the site
- **GS3.** speak in one or more languages, preferably in one of the local language of the site
- **GS4.** listen attentively to instructions communicated by supervisors
- **GS5.** communicate orally and efficiently with team members
- **GS6.** analyze the safety aspect of the workplace









- **GS7.** plan work to achieve productivity as per the direction /close supervision of superiors
- **GS8.** ensure work is done within time and as per desired quality based on instructions provided by superiors
- **GS9.** identify any violation of safety norms during the work









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Carry out preparatory work prior to concealed wiring work	10	20	-	-
PC1. arrange and stack the required hand and power tools at the identified job location	-	-	-	-
PC2. arrange and stack electrical materials such as cables, wires, conduits and fixtures required for wall chasing and LV(Low Voltage) wiring work	-	-	-	-
PC3. carry out measurement and marking on wall surface using appropriate tools as per instruction	-	-	-	-
PC4. check the working condition of tools and materials and perform the required basic maintenance	-	-	-	-
Chase wall as per marking and assist in conduit laying as per instructions	10	30	-	-
PC5. use appropriate PPE for carrying out chasing activity	-	-	-	-
PC6. carry out firm cutting on wall surface using wall chasing machine as per marking while maintaining uniform depth	-	-	-	-
PC7. finish the wall chasing work using hand tools as per standard practice maintaining the required dimension	-	-	-	-
PC8. measure, mark and cut cables and conduits as per instruction using appropriate tools	-	-	-	-
PC9. bend and join conduits as per requirement using appropriate tools	-	-	-	-
PC10. assist in placing conduits and cables/ wires and trough the same for permanent LV wiring works	-	-	-	-
PC11. clean the work locations after completion of work and dispose debris to appropriate location	-	-	-	-
PC12. assist senior in laying cables such as power and communication cables as per instructions	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Carry out external threading on MS(mild steel) conduit	10	20	-	-
PC13. carry out measurement & marking on the MS conduits	-	-	-	-
PC14. hold the conduit in pipe vice as per standard practice	-	-	-	-
PC15. cut the conduit at marking point and carry out the edge finishing using appropriate tools	-	-	-	-
PC16. fix die cutter in die stock per instructions and use lubricants as per applicability	-	-	-	-
PC17. carry out the threading activity following the applicable trade safety norms	-	-	-	-
PC18. maintain standard housekeeping practice at the workplace	-	<u>-</u>	-	-
NOS Total	30	70	-	-









National Occupational Standards (NOS) Parameters

NOS Code	CON/N0607
NOS Name	Carry out wall chasing and external threading on MS(mild steel) conduit
Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Construction Electrical Works
NSQF Level	2
Credits	2
Version	4.0
Last Reviewed Date	08/05/2025
Next Review Date	30/04/2028
NSQC Clearance Date	08/05/2025









CON/N0101: Erect and dismantle temporary scaffold up to 3.6 meter height

Description

This unit describes the skills and knowledge required to erect and dismantle 3.6 meter temporary scaffold

Scope

The scope covers the following:

• Erect and dismantle temporary scaffold

Elements and Performance Criteria

Erect and dismantle temporary scaffold

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

- **PC1.** carry out levelling in the area where scaffold needs to be erected and check for ground compactness
- **PC2.** shift and stack the materials, components, tools and tackles required for erecting scaffolding, at the identified location
- **PC3.** place base plates and sole boards on the ground as per the markings and given instructions
- **PC4.** use appropriate components and follow the standard procedure for erecting temporary scaffold up to 3.6 m in height
- **PC5.** assist in checking the verticality of scaffold at the first level of erection and take appropriate corrective measures, as required, before moving to the next level
- **PC6.** assist in checking the rigidity, stability and support of erected scaffold
- **PC7.** set up walk-boards, guard rails, toe-boards and other components on the scaffold's working platform
- **PC8.** follow the standard procedure for dismantling the temporary scaffold, i.e. removing guard rails, toe boards, walk boards and other components sequentially
- **PC9.** clean and stack all components properly after dismantling
- **PC10.** follow the recommended safety measures, including the use of appropriate PPE and being careful while working on heights

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** the use of different types of scaffolds (e.g. cup-lock, frame scaffold)
- **KU2.** the use of tools and tackles in scaffolding, including tools for erecting and dismantling 3.6 meter temporary scaffold
- **KU3.** the identification and use of different scaffolding components
- **KU4.** the standard size of scaffolding components
- KU5. the standard procedure for erecting and dismantling 3.6 m temporary scaffold









Generic Skills (GS)

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

- **GS1.** maintain the appropriate data and records
- **GS2.** read the appropriate reports and literature concerning the field of work
- GS3. communicate professionally with all the stakeholders
- **GS4.** listen attentively to understand the information/ instructions being shared and take appropriate action
- **GS5.** coordinate with the co-workers to achieve the work objectives
- GS6. identify possible disruptions to work and take appropriate mitigation measures
- **GS7.** take prompt action to deal with workplace emergencies and accidents
- GS8. evaluate all possible solutions to work-related problems and select the best one
- **GS9.** follow the recommended practices for the timely completion of work and achievement of organizational objectives









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Erect and dismantle temporary scaffold	30	70	-	-
PC1. carry out levelling in the area where scaffold needs to be erected and check for ground compactness	-	-	-	-
PC2. shift and stack the materials, components, tools and tackles required for erecting scaffolding, at the identified location	-	-	-	-
PC3. place base plates and sole boards on the ground as per the markings and given instructions	-	-	-	-
PC4. use appropriate components and follow the standard procedure for erecting temporary scaffold up to 3.6 m in height	-	-	-	-
PC5. assist in checking the verticality of scaffold at the first level of erection and take appropriate corrective measures, as required, before moving to the next level	-	-	-	-
PC6. assist in checking the rigidity, stability and support of erected scaffold	-	-	-	-
PC7. set up walk-boards, guard rails, toe-boards and other components on the scaffold's working platform	-	-	-	-
PC8. follow the standard procedure for dismantling the temporary scaffold, i.e. removing guard rails, toe boards, walk boards and other components sequentially	-	-	-	-
PC9. clean and stack all components properly after dismantling	-	-	-	-
PC10. follow the recommended safety measures, including the use of appropriate PPE and being careful while working on heights	-	-	-	-
NOS Total	30	70	-	-









National Occupational Standards (NOS) Parameters

NOS Code	CON/N0101
NOS Name	Erect and dismantle temporary scaffold up to 3.6 meter height
Sector	Construction
Sub-Sector	Generic
Occupation	Masonry
NSQF Level	3.0
Credits	2
Version	2.0
Last Reviewed Date	08/05/2025
Next Review Date	30/04/2028
NSQC Clearance Date	08/05/2025









CON/N9001: Work according to personal health, safety and environment protocols at construction site

Description

This NOS covers the skill and knowledge required for an individual to work according to personal health, safety and environmental protocols at construction site

Scope

The scope covers the following:

- Follow safety norms as defined by organization
- Adopt healthy & safe work practices
- Implement good housekeeping and environment protection process and activities
- Follow infection control guidelines as per applicability

Elements and Performance Criteria

Follow safety norms as defined by the organization

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

- **PC1.** identify and report any hazards, risks or breaches in site safety to the appropriate authority
- PC2. follow emergency and evacuation procedures in case of accidents, fires, natural calamities
- **PC3.** follow recommended safe practices in handling construction materials, including chemical and hazardous material whenever applicable
- **PC4.** follow all the protocols and safety techniques conveyed during safety awareness programs like Tool Box Talks, safety demonstrations and mock drills conducted at the site
- **PC5.** select and operate different types of fire extinguishers corresponding to various types of fires as per EHS guideline
- **PC6.** identify near miss, unsafe condition and unsafe act

Adopt healthy & safe work practices

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

- **PC7.** use appropriate Personal Protective Equipment (PPE) as per work requirements for : Head Protection, Ear protection, Fall Protection ,Foot Protection, Face and Eye Protection, Hand and Body Protection , and Respiratory Protection (if required)
- **PC8.** handle all required tools, tackles, materials and equipment safely
- **PC9.** follow safe disposal of waste, harmful and hazardous materials as per EHS guidelines
- **PC10.** check and install all safety equipment as per standard guidelines
- PC11. follow safety protocols and practices as laid down by site EHS department
- PC12. obtain "height pass" clearance for working at heights

Implement good housekeeping practices

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

PC13. collect, segregate and deposit construction waste into appropriate containers based on their toxicity or hazardous nature









PC14. apply ergonomic principles wherever required

Follow infection control guidelines as per applicability

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

- PC15. follow recommended personal hygiene, workplace hygiene and sanitization practices
- **PC16.** clean and disinfect all materials, tools and supplies before and after use
- **PC17.** report immediately to concerned authorities regarding signs and symptoms of illness of self and others

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** reporting procedures in cases of breaches or hazards for site safety, accidents, and emergency situations as per guidelines
- **KU2.** types of safety hazards at construction sites
- **KU3.** basic ergonomic principles as per applicability
- **KU4.** the procedure for responding to accidents and other emergencies at site
- **KU5.** use of appropriate personal protective equipment based on various working conditions
- **KU6.** importance of handling tools, equipment, and materials as per applicable norms
- **KU7.** effect of construction material on health and environments as per applicability
- **KU8.** various environmental protection methods as per applicability
- **KU9.** storage of waste including non-combustible scrap material and debris, combustible scrap material and debris, general construction waste and trash (non-toxic, non-hazardous), any other hazardous wastes and any other flammable wastes at the appropriate location
- **KU10.** how to keep the workplace neat and tidy so as to be safe
- **KU11.** how to use hazardous material in a safe and appropriate manner as per applicability
- **KU12.** types of fire
- **KU13.** procedure of operating different types of fire extinguishers
- **KU14.** safety relevant to tools, tackles, and equipment as per applicability
- **KU15.** housekeeping activities relevant to task
- KU16. ways of transmission of infection
- **KU17.** ways to manage infectious risks at the workplace
- **KU18.** different methods of cleaning, disinfection, sterilization, and sanitization
- **KU19.** symptoms of infection like fever, cough, redness, swelling, and inflammation

Generic Skills (GS)

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

- **GS1.** write in at least one language, preferably in the local language of the site
- **GS2.** fill safety formats for near miss, unsafe conditions and safety suggestions
- **GS3.** read in one or more language, preferably in the local language of the site









- **GS4.** speak in one or more language, preferably in one of the local language of the site
- **GS5.** listen to instructions/communication shared by site EHS and superiors regarding site safety, and conducting the toolbox talk
- **GS6.** identify potential safety risks and report to the appropriate authority
- **GS7.** assess and analyze areas which may affect health, safety and environment protocol on the site









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Follow safety norms as defined by the organization	5	15	-	-
PC1. identify and report any hazards, risks or breaches in site safety to the appropriate authority	-	-	-	-
PC2. follow emergency and evacuation procedures in case of accidents, fires, natural calamities	-	-	-	-
PC3. follow recommended safe practices in handling construction materials, including chemical and hazardous material whenever applicable	-	-	-	-
PC4. follow all the protocols and safety techniques conveyed during safety awareness programs like Tool Box Talks, safety demonstrations and mock drills conducted at the site	-	-	-	-
PC5. select and operate different types of fire extinguishers corresponding to various types of fires as per EHS guideline	-	-	-	-
PC6. identify near miss, unsafe condition and unsafe act	-	-	-	-
Adopt healthy & safe work practices	15	35	-	-
PC7. use appropriate Personal Protective Equipment (PPE) as per work requirements for : Head Protection, Ear protection, Fall Protection ,Foot Protection, Face and Eye Protection, Hand and Body Protection , and Respiratory Protection (if required)	-	-	-	-
PC8. handle all required tools, tackles, materials and equipment safely	-	-	-	-
PC9. follow safe disposal of waste, harmful and hazardous materials as per EHS guidelines	-	-	-	-
PC10. check and install all safety equipment as per standard guidelines	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. follow safety protocols and practices as laid down by site EHS department	-	-	-	-
PC12. obtain "height pass" clearance for working at heights	-	-	-	-
Implement good housekeeping practices	5	15	-	-
PC13. collect, segregate and deposit construction waste into appropriate containers based on their toxicity or hazardous nature	-	-	-	-
PC14. apply ergonomic principles wherever required	-	-	-	-
Follow infection control guidelines as per applicability	5	5	-	-
PC15. follow recommended personal hygiene, workplace hygiene and sanitization practices	-	-	-	-
PC16. clean and disinfect all materials, tools and supplies before and after use	-	-	-	-
PC17. report immediately to concerned authorities regarding signs and symptoms of illness of self and others	-	-	-	-
NOS Total	30	70	-	-









National Occupational Standards (NOS) Parameters

NOS Code	CON/N9001
NOS Name	Work according to personal health, safety and environment protocols at construction site
Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Generic Safety
NSQF Level	4
Credits	1
Version	3.0
Last Reviewed Date	08/05/2025
Next Review Date	30/04/2028
NSQC Clearance Date	08/05/2025









CON/N8001: Work effectively in a team to deliver desired results at the workplace

Description

This unit describes the skills and knowledge required to work effectively within a team to achieve the desired results

Scope

The scope covers the following:

- Interact and communicate in an effective manner
- Support co-workers to execute the project requirements
- Practice inclusion

Elements and Performance Criteria

Interact and communicate in an effective manner

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

- PC1. pass on work related information/ requirement clearly to the team members
- **PC2.** inform co-workers and superiors about any kind of deviations from work
- **PC3.** report any unresolved problem to the supervisor immediately
- **PC4.** obtain instructions from superiors and respond on the same
- **PC5.** communicate to team members/subordinates for appropriate work technique and method
- **PC6.** seek clarification and advice as per the requirement

Support co-workers to execute the project requirements

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

- **PC7.** hand over the required material, tools, tackles, equipment and work fronts timely to interfacing teams
- **PC8.** work together with co-workers in a synchronized manner

Practice inclusion

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

- **PC9.** maintain cultural inclusivity at work place
- **PC10.** maintain disability friendly work practices
- PC11. follow gender neutral practices at workplace
- **PC12.** address discriminatory and offensive behaviour in a professional manner as per organizational policy

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. own roles and responsibilities









- **KU2.** importance of effective communication
- **KU3.** the consequence of poor teamwork on project outcomes, timelines, safety at the construction site, etc.
- **KU4.** different modes of communication used at workplace
- **KU5.** importance of creating healthy and cooperative work environment among the gangs of workers
- **KU6.** different activities within the work area where interaction with other workers is required
- **KU7.** applicable techniques of work, properties of materials used, tools and tackles used, safety standards that co-workers might need as per the requirement
- **KU8.** importance of proper and effective communication and the expected adverse effects in case of failure relating to quality, timeliness, safety, risks at the construction project site
- **KU9.** importance and need of supporting co-workers facing problems for the smooth functioning of work
- **KU10.** the fundamental concept of gender equality
- KU11. how to recognise and be sensitive to issues of disability, culture and gender
- **KU12.** legislation, policies, and procedures relating to gender sensitivity and cultural diversity including their impact on the area of operation

Generic Skills (GS)

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

- **GS1.** write in at least one language, preferably in the local language of the site
- **GS2.** read the communication regarding work completion, materials used, tools and tackles used, the resource required, etc,
- **GS3.** speak in one or more languages, preferably in one of the local language of the site
- **GS4.** listen and follow instructions / communication shared by superiors/ co-workers regarding team requirements or interfaces during work processes
- **GS5.** communicate orally and effectively with co-workers considering their educational and social background
- **GS6.** decide on what information is to be shared with co-workers within the team or to the interfacing gang of workers
- **GS7.** plan work and organize the required resources in coordination with team members
- **GS8.** complete all assigned task in coordination with team members
- **GS9.** take initiative in resolving issues among co-workers or report the same to superiors
- **GS10.** ensure best ways of coordination among team members
- **GS11.** evaluate the complexity of task and determine if any guidance is required from superiors









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Interact and communicate in an effective manner	20	40	-	-
PC1. pass on work related information/ requirement clearly to the team members	-	-	-	-
PC2. inform co-workers and superiors about any kind of deviations from work	-	-	-	-
PC3. report any unresolved problem to the supervisor immediately	-	-	-	-
PC4. obtain instructions from superiors and respond on the same	-	-	-	-
PC5. communicate to team members/subordinates for appropriate work technique and method	-	-	-	-
PC6. seek clarification and advice as per the requirement	-	-	-	-
Support co-workers to execute the project requirements	5	15	-	-
PC7. hand over the required material, tools, tackles, equipment and work fronts timely to interfacing teams	-	-	-	-
PC8. work together with co-workers in a synchronized manner	-	-	-	-
Practice inclusion	5	15	-	-
PC9. maintain cultural inclusivity at work place	-	-	-	-
PC10. maintain disability friendly work practices	-	-	-	-
PC11. follow gender neutral practices at workplace	-	-	-	-
PC12. address discriminatory and offensive behaviour in a professional manner as per organizational policy	-	-	-	-
NOS Total	30	70	-	-









National Occupational Standards (NOS) Parameters

NOS Code	CON/N8001
NOS Name	Work effectively in a team to deliver desired results at the workplace
Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Generic 2
NSQF Level	4
Credits	1
Version	3.0
Last Reviewed Date	08/05/2025
Next Review Date	30/04/2028
NSQC Clearance Date	08/05/2025









DGT/VSQ/N0101: Employability Skills (30 Hours)

Description

This unit is about employability skills, Constitutional values, becoming a professional in the 21st Century, digital, financial, and legal literacy, diversity and Inclusion, English and communication skills, customer service, entrepreneurship, and apprenticeship, getting ready for jobs and career development.

Scope

The scope covers the following:

- Introduction to Employability Skills
- Constitutional values Citizenship
- Becoming a Professional in the 21st Century
- Basic English Skills
- Communication Skills
- Diversity & Inclusion
- Financial and Legal Literacy
- Essential Digital Skills
- Entrepreneurship
- Customer Service
- Getting ready for Apprenticeship & Jobs

Elements and Performance Criteria

Introduction to Employability Skills

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

PC1. understand the significance of employability skills in meeting the job requirements

Constitutional values - Citizenship

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

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

Becoming a Professional in the 21st Century

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

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

Basic English Skills

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

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

Communication Skills

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

PC5. follow good manners while communicating with others

PC6. work with others in a team









Diversity & Inclusion

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

- **PC7.** communicate and behave appropriately with all genders and PwD
- PC8. report any issues related to sexual harassment

Financial and Legal Literacy

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

- **PC9.** use various financial products and services safely and securely
- **PC10.** calculate income, expenses, savings etc.
- **PC11.** approach the concerned authorities for any exploitation as per legal rights and laws

Essential Digital Skills

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

- PC12. operate digital devices and use its features and applications securely and safely
- **PC13.** use internet and social media platforms securely and safely

Entrepreneurship

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

- PC14. identify and assess opportunities for potential business
- PC15. identify sources for arranging money and associated financial and legal challenges

Customer Service

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

- **PC16.** identify different types of customers
- **PC17.** identify customer needs and address them appropriately
- **PC18.** follow appropriate hygiene and grooming standards

Getting ready for apprenticeship & Jobs

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

- PC19. create a basic biodata
- **PC20.** search for suitable jobs and apply
- PC21. identify and register apprenticeship opportunities as per requirement

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** need for employability skills
- **KU2.** various constitutional and personal values
- **KU3.** different environmentally sustainable practices and their importance
- **KU4.** Twenty first (21st) century skills and their importance
- **KU5.** how to use basic spoken English language
- **KU6.** Do and dont of effective communication
- **KU7.** inclusivity and its importance
- KU8. different types of disabilities and appropriate communication and behaviour towards PwD
- **KU9.** different types of financial products and services









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

Generic Skills (GS)

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

- **GS1.** communicate effectively using appropriate language
- GS2. behave politely and appropriately with all
- **GS3.** perform basic calculations
- **GS4.** solve problems effectively
- **GS5.** be careful and attentive at work
- **GS6.** use time effectively
- **GS7.** maintain hygiene and sanitisation to avoid infection









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Introduction to Employability Skills	1	1	-	-
PC1. understand the significance of employability skills in meeting the job requirements	-	-	-	-
Constitutional values - Citizenship	1	1	-	-
PC2. identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices	-	-	-	-
Becoming a Professional in the 21st Century	1	3	-	-
PC3. explain 21st Century Skills such as Self-Awareness, Behavior Skills, Positive attitude, self-motivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset etc.	-	-	-	-
Basic English Skills	2	3	-	-
PC4. speak with others using some basic English phrases or sentences	-	-	-	-
Communication Skills	1	1	-	-
PC5. follow good manners while communicating with others	-	-	-	-
PC6. work with others in a team	-	-	-	-
Diversity & Inclusion	1	1	-	-
PC7. communicate and behave appropriately with all genders and PwD	-	-	-	-
PC8. report any issues related to sexual harassment	-	-	-	-
Financial and Legal Literacy	3	4	-	-
PC9. use various financial products and services safely and securely	-	-	-	-









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









National Occupational Standards (NOS) Parameters

NOS Code	DGT/VSQ/N0101
NOS Name	Employability Skills (30 Hours)
Sector	Cross Sectoral
Sub-Sector	Professional Skills
Occupation	Employability
NSQF Level	2
Credits	1
Version	1.0
Last Reviewed Date	30/04/2025
Next Review Date	30/04/2028
NSQC Clearance Date	30/04/2025

Assessment Guidelines and Assessment Weightage

Assessment Guidelines

- 1. Criteria for assessment for each Qualification Pack will be created by CSDCI. Each Performance Criteria (PC)/ Elements will be assigned marks proportional to its importance in NOS.
- 2. CSDCI will also lay down proportion of marks for Theory and Skills Practical for each PC/ Elements. The assessment for the knowledge part will be based on knowledge bank of questions created by Assessment Bodies subject to approval by CSDCI.
- 3. Individual assessment agencies will create unique question papers for knowledge/theory part for assessment of candidates as per assessment criteria given below:
- a) Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training center based on assessment criteria.
- b) The passing percentage for the QP will be 70%. To pass the Qualification Pack.
- c) The Assessor shall check the final outcome of the practices while evaluating the steps performed to achieve the final outcome
- d) The trainee shall be provided with a chance to repeat the test to correct his procedures in case of









improper performance, with a deduction of marks for each iteration.

- e) After the certain number of iteration as decided by SSC the trainee is marked as fail, scoring zero marks for the procedure for the practical activity.
- f) In case of successfully passing only certain number of NOS's, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack within the specified time frame set by CSDCI.
- g) The candidates shall undergo On job training (OJT), and will learn at actual workplace for a fixed period of time and a certain weightage of assessment is allocated out of total skill weightage of Qualification Pack for undergoing OJT as stipulated by CSDCI. This OJT score and assessors' end point score are combined to arrive at final Marking/grading of trainees' skill test. The OJT score is determined by Supervisor of company under which candidates undergo on job training.

Minimum Aggregate Passing % at QP Level: 50

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

Assessment Weightage

Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
CON/N0606.Handle different tools, measuring devices and materials relevant to LV (low voltage) electrical works	30	70	-	-	100	20
CON/N0607.Carry out wall chasing and external threading on MS(mild steel) conduit	30	70	-	-	100	30
CON/N0101.Erect and dismantle temporary scaffold up to 3.6 meter height	30	70	-	-	100	20
CON/N9001.Work according to personal health, safety and environment protocols at construction site	30	70	-	-	100	10









National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
CON/N8001.Work effectively in a team to deliver desired results at the workplace	30	70	-	-	100	10
DGT/VSQ/N0101.Employability Skills (30 Hours)	20	30	-	-	50	10
Total	170	380	-	-	550	100









Acronyms

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training
MSDE	Ministry of Skill Development and Entrepreneurship
NCVET	National Council for Vocational Education and Training
NSDC	National Skill Development Corporation
SIDH	Skill India Digital Hub
CSDCI	Constriction Skill Development Council of India
AB	Awarding Body
SSC	Sector Skill Council
PMKVY	Pradhan Mantri Kaushal Vikas Yojana
DDU-GKY	Deen Dayal Upadhyaya Grameen Kaushalya Yojana
SANKALP	Skill Acquisition and Knowledge Awareness for Livelihood Promotion
STRIVE	Skills Strengthening for Industrial Value Enhancement
JSS	Jan Shikshan Sansthan
STT	Short Term Training
RPL	Recognition of Prior Learning
NAPS	National Apprenticeship Promotion Scheme
AA	Assessment Agency
ТР	Training Provider / Training Partner
тс	Training Centre
ITI	Industrial Training Institute
NSQC	National Skill Qualification Committee
NSQF	National Skills Qualification Framework









Q-File	Qualification File
QP	Qualification Pack
МС	Model Curriculum
NOS	National Occupational Standards
PC	Performance Criteria
KU	Knowledge and Understanding
GS	Generic Skills
мсо	Multiple Choice Question
EHS	Environment Health and Safety
PPE	Personal Protective Equipment
QA/QC	Quality Assurance / Quality Control
LT	Low Tension (Electrical wiring system up to 1kV)
НТ	High Tension (Electrical wiring system above 1kV)
МСВ	Miniature Circuit Breaker
ELCB	Earth Leakage Circuit Breaker
RCCB	Residual Current Circuit Breaker
RCBO	Residual Current Breaker with Overcurrent
ACSR	Aluminium Conductor Steel Reinforced
PVC	Polyvinyl Chloride (used in electrical wiring insulation)
XLPE	Cross-Linked Polyethylene (used in power cables)
SMPS	Switched Mode Power Supply
IP Rating	Ingress Protection Rating (for electrical enclosures)
VFD	Variable Frequency Drive (used for motor speed control)
DOL Starter	Direct-On-Line Starter (used for motors)
СТ	Current Transformer
PT	Potential Transformer









LED	Light Emitting Diode
UPS	Uninterruptible Power Supply
DG Set	Diesel Generator Set









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.
National Occupational Standard	NOS define the measurable performance outcomes required from an individual engaged in a particular task. They list down what an individual performing that task should know and also do.
Qualification	A formal outcome of an assessment and validation process which is obtained when a competent body determines that an individual has achieved learning outcomes to given standards
Qualification File	A Qualification File is a template designed to capture necessary information of a Qualification from the perspective of NSQF compliance. The Qualification File will be normally submitted by the awarding body for the qualification.
Sector	A grouping of professional activities on the basis of their main economic function, product, service or technology.
Long Term Training	Long-term skilling means any vocational training program undertaken for a year and above. https://ncvet.gov.in/sites/default/files/NCVET.pdf
Declarative Knowledge	Declarative knowledge refers to facts, concepts and principles that need to be known and/or understood in order to accomplish a task or to solve a problem.
Key Learning Outcome	Key learning outcome is the statement of what a learner needs to know, understand and be able to do in order to achieve the terminal outcomes. A set of key learning outcomes will make up the training outcomes. Training outcome is specified in terms of knowledge, understanding (theory) and skills (practical application).









ОЈТ (М)	On-the-job training (Mandatory), trainees are mandated to complete specified hours of training on site
OJT (R)	On-the-job training (Recommended), trainees are recommended the specified hours of training on site
Procedural Knowledge	Procedural knowledge addresses how to do something, or how to perform a task. It is the ability to work, or produce a tangible work output by applying cognitive, affective or psychomotor skills.
Training Outcome	Training outcome is a statement of what a learner will know, understand and be able to do it upon the completion of the training.
Terminal Outcome	Terminal outcome is a statement of what a learner will know, understand and be able to do upon the completion of a module. A set of terminal outcomes help to achieve the training outcome.