









Construction Electrician - LV

QP Code: CON/Q0603

Version: 5.0

NSQF Level: 4

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CON/Q0603: Construction Electrician - LV

Brief Job Description

A Construction Electrician - LV is responsible for laying cables installing, and maintaining equipment like motors, bar cutting machines, bar shearing machines etc. at the construction sites as per the requirement of construction activities. The responsibilities also include carrying out permanent wiring and assisting the foreman in the electrification of buildings. The individual uses electrical drawings, diagrams, and related documents to carry out the activities.

Personal Attributes

The individual should be physically fit to work across varying sites and conditions. The person should be organized, diligent, methodical, and safety-conscious. The individual should have good communication skills.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

- 1. <u>CON/N0608</u>: Lay (single/three phase) cable and provide electrification for equipment at construction sites
- 2. CON/N0609: Inspect electrical maintenance of construction equipment as per requirement
- 3. CON/N0610: Carry out LV electrical wiring and assist the foreman in building electrification works
- 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. CON/N8002: Plan and organize work to meet expected outcomes
- 7. 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	4
Credits	15
Aligned to NCO/ISCO/ISIC Code	NCO-2015/7411.0100
Minimum Educational Qualification & Experience	12th grade Pass OR Completed 2nd year of the 3-year diploma after 10 OR 11th grade pass with 1 Year of experience Relevant Experience OR 10th grade pass with 2 Years of experience Relevant Experience OR 8th grade pass with 4 Years of experience Relevant Experience OR Previous relevant Qualification of NSQF Level (Level 3 (Assistant Electrician)) with 3 Years of experience Relevant Experience
Minimum Level of Education for Training in School	10th Class
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years
Last Reviewed On	NA
Next Review Date	30/04/2028
NSQC Approval Date	08/05/2025
Version	5.0
Reference code on NQR	QG-04-CO-03952-2025-V2-CSDCI
NQR Version	5.0









CON/N0608: Lay (single/three phase) cable and provide electrification for equipment at construction sites

Description

This unit describes the skills and knowledge required to lay (single/ three-phase) cable and provide electrification for equipment at construction sites

Scope

The scope covers the following:

- Prepare for cable laying
- Lay cable and provide electrification for construction equipment

Elements and Performance Criteria

Prepare for cable laying

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

- **PC1.** assist superior in planning (method, material specification, time requirement) of cable laying activity at construction sites
- **PC2.** read and interpret electrical drawings, specifications, manufacturers guidelines as and when required
- **PC3.** check cables, lights and accessories to be used according to instructions/ drawings/ manufacturers specifications as per applicability
- **PC4.** inspect work area for embedded service lines, presence of water table, and vicinity of flammable items prior to cable laying
- **PC5.** carry out safe isolation of power source as per applicable specification/ electrical safety norms and erect caution signages at appropriate location
- **PC6.** arrange for execution of preparatory activities such as digging of trenches, laying of conduits, erection of poles etc.
- **PC7.** fill up necessary permits, checklists as per organizational norms for preparatory activities

Lay cable and provide electrification for construction equipment

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

- **PC8.** lay cables according to standard practice through trenches, conduits or by means of poles at construction sites
- **PC9.** check for rigidity of poles, condition of exposed cables and fittings, depth and backfilling of trenches, proper barricading as per safety norms as and when necessary
- **PC10.** connect cable to power source and electrical equipment/ machinery as per manufacturers quidelines or standard practice
- **PC11.** carry out proper termination of cables as per specification or standard practice
- **PC12.** install circuit breakers, starters, relays etc. of correct power rating as per specification of the equipment
- PC13. carry out earthing of the equipment (if applicable) by suitable method









- **PC14.** carry out trial run and perform applicable electrical tests to ensure safe and desired working of construction equipment
- **PC15.** secure exposed cables and its accessories against man, vehicular movement or any other external abrasive effects by adopting suitable insulation methods or industry recognized standard practices
- **PC16.** ensure upkeep of all electrical tools and equipment under operation, according to manufacturers guidelines or standard procedures
- **PC17.** ensure tagging of embedded, exposed electrical lines, its accessories and other equipment
- **PC18.** ensure proper housekeeping of the work area

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** standard practices for establishing temporary LV power connection arrangement at the construction site
- **KU2.** safety rules and regulations for handling and storing relevant tools, equipment, and materials for electrical works in accordance with organizational norms
- **KU3.** importance of personal protection including the use of related safety gears & equipment in accordance with organizational norms
- **KU4.** service request procedures for tools, materials and equipment as per organizational norms
- **KU5.** guidelines provided in Indian Standard code of practice applicable to electrical works
- **KU6.** wiring symbols used in single and three phase connections
- **KU7.** how to read and interpret single line diagram (SLD), and schematics, wiring diagrams of electrical connection
- **KU8.** manufacturers guidelines/ specifications for use of hand and power tools and measuring devices
- **KU9.** electrical units of measurements and their signs (such as Watt, Ampere, Ohm, volt etc.)
- KU10. concept of AC, DC, circuits and their respective properties
- **KU11.** concept about working principle of AC and DC circuits and factors related to the same
- **KU12.** sequencing and executing cable laying at construction sites as per standard practice, plans or instructions
- **KU13.** concept of 3 phase circuit and its advantages over single-phase connection, star and delta connection
- **KU14.** requirement of cables and accessories (single phase/ 3 phase) of equipment
- **KU15.** features of AC single phase and 3 phase connections including star and delta connections
- **KU16.** tests to be performed in balanced 3 phase circuits
- **KU17.** checks to be done for the cables and their laying locations at construction sites to ensure safe working condition
- **KU18.** standard procedures of safeguarding exposed cables against external damages
- **KU19.** the process of measuring resistance, electrical current flow, voltage as per requirement using appropriate electrical measuring devices like digital multimeter, tong tester, digital voltmeter, etc.
- **KU20.** safe method of electrical isolation and use of tools in the operation









- **KU21.** different methods of earthing including measurement of earth resistance by earth tester, testing of earth Leakage by ELCB and relay, etc.
- **KU22.** standard procedure of termination of cables at the power sources and equipment
- **KU23.** use of MCB, RCCB and ELCB in equipment, their working principles and power ratings
- **KU24.** concepts of electrical circuits which includes properties and functions of RCL circuits, inductive DC, AC circuits, details of capacitors, inductors and their actions in DC, AC circuits
- **KU25.** type of connections and tests to be carried out in capacitive, inductive AC and DC circuits
- **KU26.** operational characteristics of electrical systems and internal components

Generic Skills (GS)

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

- **GS1.** write in at least two languages, preferably the local language at the site and basic English
- **GS2.** read SLDs, work, and safety-related instructions/signboards in one or more languages, preferably in the local language of the site
- **GS3.** speak in at least one language, preferably in one of the local languages of the site
- **GS4.** listen attentively to instructions communicated by supervisors
- **GS5.** communicate orally and efficiently with team members
- **GS6.** plan work and organize required resource effectively
- **GS7.** complete work as per agreed time schedule and quality parameters
- **GS8.** resolve any conflict within the team members
- **GS9.** analyze the safety aspect of the workplace
- **GS10.** evaluate the complexity of the tasks
- **GS11.** identify any violation of safety norms during the work









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Prepare for cable laying	15	30	-	-
PC1. assist superior in planning (method, material specification, time requirement) of cable laying activity at construction sites	-	-	-	-
PC2. read and interpret electrical drawings, specifications, manufacturers guidelines as and when required	-	-	-	-
PC3. check cables, lights and accessories to be used according to instructions/ drawings/ manufacturers specifications as per applicability	-	-	-	-
PC4. inspect work area for embedded service lines, presence of water table, and vicinity of flammable items prior to cable laying	-	-	-	-
PC5. carry out safe isolation of power source as per applicable specification/ electrical safety norms and erect caution signages at appropriate location	-	-	-	-
PC6. arrange for execution of preparatory activities such as digging of trenches, laying of conduits, erection of poles etc.	-	-	-	-
PC7. fill up necessary permits, checklists as per organizational norms for preparatory activities	-	-	-	-
Lay cable and provide electrification for construction equipment	15	40	-	-
PC8. lay cables according to standard practice through trenches, conduits or by means of poles at construction sites	-	-	-	-
PC9. check for rigidity of poles, condition of exposed cables and fittings, depth and backfilling of trenches, proper barricading as per safety norms as and when necessary	-	-	-	-
PC10. connect cable to power source and electrical equipment/ machinery as per manufacturers guidelines or standard practice	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. carry out proper termination of cables as per specification or standard practice	-	-	-	-
PC12. install circuit breakers, starters, relays etc. of correct power rating as per specification of the equipment	-	-	-	-
PC13. carry out earthing of the equipment (if applicable) by suitable method	-	-	-	-
PC14. carry out trial run and perform applicable electrical tests to ensure safe and desired working of construction equipment	-	-	-	-
PC15. secure exposed cables and its accessories against man, vehicular movement or any other external abrasive effects by adopting suitable insulation methods or industry recognized standard practices	-	-	-	-
PC16. ensure upkeep of all electrical tools and equipment under operation, according to manufacturers guidelines or standard procedures	-	-	-	-
PC17. ensure tagging of embedded, exposed electrical lines, its accessories and other equipment	-	-	-	-
PC18. ensure proper housekeeping of the work area	-	-	-	-
NOS Total	30	70	-	-









National Occupational Standards (NOS) Parameters

NOS Code	CON/N0608
NOS Name	Lay (single/three phase) cable and provide electrification for equipment at construction sites
Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Construction Electrical Works
NSQF Level	4
Credits	3
Version	5.0
Last Reviewed Date	08/05/2025
Next Review Date	30/04/2028
NSQC Clearance Date	08/05/2025









CON/N0609: Inspect electrical maintenance of construction equipment as per requirement

Description

This unit describes the skills and knowledge required to inspect electrical maintenance of construction equipment as per the requirement.

Scope

The scope covers the following:

• Carry out repair and maintenance of cables and construction equipment

Elements and Performance Criteria

Carry out repair and maintenance of cables and construction equipment

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

- **PC1.** carry out appropriate tests and diagnose electrical faults of equipment as and when necessary
- **PC2.** power off equipment under maintenance or take necessary precautions as per standard practice while performing tests on live circuits
- **PC3.** carry out safe isolation at power source as per applicable specification/ electrical safety norms and erect caution signages at appropriate location
- **PC4.** determine the type (DC/AC) of motors to be repaired or installed
- **PC5.** repair or replace faulty parts according to the power rating and manufacturers guideline relevant to circuit under maintenance
- **PC6.** use appropriate motor starters according to the specification and power rating of motors during maintenance
- **PC7.** carry out winding in armatures of motor if required as per specification of motor
- **PC8.** inspect and rectify faults detected in earthing of construction equipment, referring to manufacturers guidelines
- **PC9.** replace faulty parts like relays, MCBs, wires, switches, sockets etc
- **PC10.** inspect leakage, faults in LV single/ three phase power distribution wirings as per directions, standard practices
- **PC11.** operate and inspect transformers to detect faults under close supervision
- **PC12.** carry out maintenance of lighting arrangements installed at critically accessable locations such as tower cranes, high masts etc. and replace faulty parts, consumables as and when required
- **PC13.** join damaged armored cables (bearing heavy electricity loads) using straight through joints efficiently
- **PC14.** operate changeover switches for switching between main power supply & DGS as per requirement
- **PC15.** ensure safe and desired working of temporary electrical panels/ distribution boards at construction sites









- **PC16.** notify concerned authorities prior to undertaking maintenance activity as per applicable organizational norms
- **PC17.** document readings, conclusions of tests performed as per requirement

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** standard practices and procedures for maintenance of temporary electrical works / panels
- **KU2.** safety rules and regulations for handling and storing relevant tools, equipment, and materials for electrical works in accordance with organizational norms
- **KU3.** importance of personal protection including the use of related safety gears & equipment in accordance with organizational norms
- **KU4.** service request procedures for tools, materials and equipment as per organizational norms
- **KU5.** guidelines provided in Indian Standard code of practice applicable to electrical works
- **KU6.** wiring symbols used in single and three phase connections
- **KU7.** how to read and interpret single line diagram (SLD), and schematics, wiring diagrams of electrical connection
- **KU8.** type of cables (single phase/ 3 phase) are to be used based on electrical load requirement of circuits, insulations and type of equipment to be installed
- **KU9.** use of measuring devices like digital multimeter, tong tester, digital voltmeter while establishing electrical connections to the equipment at construction sites
- **KU10.** concepts of electrical circuits which includes properties and functions of RCL circuits, inductive DC, AC circuits, details of capacitors, inductors and their actions in DC, AC circuits
- **KU11.** type of connections and tests to be carried out in capacitive, inductive AC and DC circuits
- **KU12.** working principle of different types of motors and their respective uses
- KU13. concept of star, delta connection and their uses in electrical circuits
- **KU14.** concept and working principle of various type of starters used in DC motors such as 3point, 4 point etc. as well as 3 phase squirrel cage induction motors such as DOL, Star-Delta etc
- **KU15.** working principle of different types of 3 phase transformers, connections (starstar, deltadelta, delta-star) and their components
- **KU16.** basic concept of application of respective transformers and relevant terminologies like magnetic flux, winding, current and voltage ratio, core and shell construction etc
- **KU17.** different methods of earthing including measurement of earth resistance by earth tester, testing of earth Leakage by ELCB and relay, etc.
- **KU18.** standard procedure of termination of cables at the power sources and equipment
- **KU19.** use of MCB, RCCB and ELCB in equipment , their working principles and power ratings
- **KU20.** operational characteristics of electrical systems and internal components

Generic Skills (GS)

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

GS1. write in at least two languages, preferably the local language at the site and basic English









- **GS2.** read SLDs, work and safety-related instructions/signboards in one or more languages, preferably in the local language of the site
- **GS3.** speak in at least one language, preferably in one of the local languages of the site
- **GS4.** communicate orally and efficiently with team members
- **GS5.** analyze the safety aspect of the workplace
- **GS6.** plan work and organize required resource effectively
- **GS7.** complete work as per agreed time schedule and quality parameters
- **GS8.** resolve any conflict within the teammates
- **GS9.** evaluate the complexity of the tasks
- **GS10.** 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 repair and maintenance of cables and construction equipment	30	70	-	-
PC1. carry out appropriate tests and diagnose electrical faults of equipment as and when necessary	-	-	-	-
PC2. power off equipment under maintenance or take necessary precautions as per standard practice while performing tests on live circuits	-	-	-	-
PC3. carry out safe isolation at power source as per applicable specification/ electrical safety norms and erect caution signages at appropriate location	-	-	-	-
PC4. determine the type (DC/AC) of motors to be repaired or installed	-	-	-	-
PC5. repair or replace faulty parts according to the power rating and manufacturers guideline relevant to circuit under maintenance	-	-	-	-
PC6. use appropriate motor starters according to the specification and power rating of motors during maintenance	-	-	-	-
PC7. carry out winding in armatures of motor if required as per specification of motor	-	-	-	-
PC8. inspect and rectify faults detected in earthing of construction equipment, referring to manufacturers guidelines	-	-	-	-
PC9. replace faulty parts like relays, MCBs, wires, switches, sockets etc	-	-	-	-
PC10. inspect leakage, faults in LV single/ three phase power distribution wirings as per directions, standard practices	-	-	-	-
PC11. operate and inspect transformers to detect faults under close supervision	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. carry out maintenance of lighting arrangements installed at critically accessable locations such as tower cranes, high masts etc. and replace faulty parts, consumables as and when required	-	-	-	-
PC13. join damaged armored cables (bearing heavy electricity loads) using straight through joints efficiently	-	-	-	-
PC14. operate changeover switches for switching between main power supply & DGS as per requirement	-	-	-	-
PC15. ensure safe and desired working of temporary electrical panels/ distribution boards at construction sites	-	-	-	-
PC16. notify concerned authorities prior to undertaking maintenance activity as per applicable organizational norms	-	-	-	-
PC17. document readings, conclusions of tests performed as per requirement	-	-	-	-
NOS Total	30	70	-	-









National Occupational Standards (NOS) Parameters

NOS Code	CON/N0609
NOS Name	Inspect electrical maintenance of construction equipment as per requirement
Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Construction Electrical Works
NSQF Level	4
Credits	3
Version	5.0
Last Reviewed Date	08/05/2025
Next Review Date	30/04/2028
NSQC Clearance Date	08/05/2025









CON/N0610: Carry out LV electrical wiring and assist the foreman in building electrification works

Description

This unit describes the skills and knowledge required to carry out LV electrical wiring and provide assistance in building electrification works.

Scope

The scope covers the following:

- Perform concealed / exposed wiring and electrification
- Install and maintain electrical fixtures/ fittings, earthing arrangement and home appliances

Elements and Performance Criteria

Perform concealed /exposed wiring and electrification

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

- **PC1.** perform visual checks of the house wiring components (such as wires, flexible and rigid conduits, PVC raceways, wooden battens, clamps etc.) prior to its use in concealed wiring
- **PC2.** read and interpret single phase wiring diagram and assist in estimation of required materials
- **PC3.** carry out necessary measurements of cables/ conduits to meet working needs and in order to carry out marking on wall
- **PC4.** mark the walls for chasing for concealed wiring, and monitor the chasing work
- **PC5.** assist in planning for electrification, and mark locations for installation of raceways and electrical fixtures/ fittings on the walls
- **PC6.** lay flexible conduit pipes through RCC structures (slabs, beams, walls) or through chased wall (brick wall) surface as per instruction
- **PC7.** ensure to lock conduit pipe in its location using clamps or other standard means
- **PC8.** place wires through conduits and raceways ensuring that wires are as per specification and numbers
- **PC9.** carry out drilling and cutting works as per requirement

Install and maintain electrical fixtures/ fittings, earthing arrangement and home appliances

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

- **PC10.** prepare tentative budget for household wiring and electrification work
- PC11. calculate electrical material requirements based on electrical fittings and layouts
- **PC12.** carry out safe isolation of power source as per applicable specification/ electrical safety norms and erect caution signages at appropriate location
- **PC13.** install electrical fixtures, fittings (such as DBs, switch boards, switches, sockets, lights and wall brackets) at specified locations and carry out termination of cables as per standard practice
- **PC14.** perform necessary tests to ensure safe condition of electrical circuit during and post wiring activity using appropriate tools









- **PC15.** measure earth resistance and leakage as per requirement, using appropriate electrical devices
- **PC16.** carry out electrical earthing work adopting standard procedure and using appropriate earthing components as per instructions
- **PC17.** establish new LV connection if required as per circuit load requirement and install household appliances including fan, water pump, refrigerator, fire alarm system, security systems etc
- **PC18.** identify and install protective devices of correct power rating, at appropriate locations of wiring
- **PC19.** adhere to electrical safety norms and act/ report efficiently on detection of any unsafe situation
- **PC20.** note relevant readings and fill up checklist as per requirement

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** standard practices for electrical wiring and electrification works
- **KU2.** safety rules and regulations for handling and storing relevant tools, equipment, and materials for electrical works in accordance with organizational norms
- **KU3.** importance of personal protection including the use of related safety gears & equipment in accordance with organizational norms
- **KU4.** service request procedures for tools, materials and equipment as per organizational norms
- **KU5.** guidelines provided in Indian Standard code of practice applicable to electrical works
- **KU6.** statutory guidelines provided by ISI for LV wiring operations
- **KU7.** drawings, circuit diagrams and/or related schematics for single and three-phase LV house wiring system
- **KU8.** how to estimate required material quantity from electrical drawings
- **KU9.** manufacturers guidelines/ specifications for use of electrical fittings and fixtures
- **KU10.** use of 3 phases, single phase connections as per electrical drawing, specifications
- **KU11.** specification, color coding of cables to be used in wiring system according to load on circuit
- **KU12.** properties of different components used in electrical earthing work
- **KU13.** principle of different methods of earthing i.e. pipe, plate, etc.
- **KU14.** the process of measurement of Earth resistance by earth tester
- KU15. test of Earth Leakage by ELCB and relay
- **KU16.** area of application & specification of protective devices like fire alarm, MCB, ELCB, MCCB
- **KU17.** how to plan lighting arrangement which may enable maximum use of natural lights
- **KU18.** current tentative market rate of common electrical items
- **KU19.** common electrical brands and their products and customer preferences regarding brands and trends
- **KU20.** standard house wiring procedure and best practices
- **KU21.** use of ladders, scaffolds, PPEs, shock resistance gloves during working/ performing tests in a live circuit
- **KU22.** use of power drill machine and selection of drill bit for drilling works









Generic Skills (GS)

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

- **GS1.** write in at least two languages, preferably the local language at the site and basic English
- **GS2.** read SLDs, work and safety-related instructions/signboards in one or more languages, preferably in the local language of the site
- **GS3.** communicate orally and effectively with team members
- **GS4.** decide on the safety of the workplace and ensure the work does not create hazardous conditions
- **GS5.** plan work and organize required resource effectively
- **GS6.** complete work as per agreed time schedule and quality parameters
- **GS7.** resolve any conflict within the teammates
- **GS8.** evaluate the complexity of the tasks
- GS9. identify any violation of safety norms during the work









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Perform concealed /exposed wiring and electrification	15	35	-	-
PC1. perform visual checks of the house wiring components (such as wires, flexible and rigid conduits, PVC raceways, wooden battens, clamps etc.) prior to its use in concealed wiring	-	-	-	-
PC2. read and interpret single phase wiring diagram and assist in estimation of required materials	-	-	-	-
PC3. carry out necessary measurements of cables/ conduits to meet working needs and in order to carry out marking on wall	-	-	-	-
PC4. mark the walls for chasing for concealed wiring, and monitor the chasing work	-	-	-	-
PC5. assist in planning for electrification, and mark locations for installation of raceways and electrical fixtures/ fittings on the walls	-	-	-	-
PC6. lay flexible conduit pipes through RCC structures (slabs, beams, walls) or through chased wall (brick wall) surface as per instruction	-	-	-	-
PC7. ensure to lock conduit pipe in its location using clamps or other standard means	-	-	-	-
PC8. place wires through conduits and raceways ensuring that wires are as per specification and numbers	-	-	-	-
PC9. carry out drilling and cutting works as per requirement	-	-	-	-
Install and maintain electrical fixtures/ fittings, earthing arrangement and home appliances	15	35	-	-
PC10. prepare tentative budget for household wiring and electrification work	-	-	-	-
PC11. calculate electrical material requirements based on electrical fittings and layouts	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. carry out safe isolation of power source as per applicable specification/ electrical safety norms and erect caution signages at appropriate location	-	-	-	-
PC13. install electrical fixtures, fittings (such as DBs, switch boards, switches, sockets, lights and wall brackets) at specified locations and carry out termination of cables as per standard practice	-	-	-	-
PC14. perform necessary tests to ensure safe condition of electrical circuit during and post wiring activity using appropriate tools	-	-	-	-
PC15. measure earth resistance and leakage as per requirement, using appropriate electrical devices	-	-	-	-
PC16. carry out electrical earthing work adopting standard procedure and using appropriate earthing components as per instructions	-	-	-	-
PC17. establish new LV connection if required as per circuit load requirement and install household appliances including fan, water pump, refrigerator, fire alarm system, security systems etc	-	-	-	-
PC18. identify and install protective devices of correct power rating, at appropriate locations of wiring	-	-	-	-
PC19. adhere to electrical safety norms and act/report efficiently on detection of any unsafe situation	-	-	-	-
PC20. note relevant readings and fill up checklist as per requirement	-	-	-	-
NOS Total	30	70	-	-









National Occupational Standards (NOS) Parameters

NOS Code	CON/N0610
NOS Name	Carry out LV electrical wiring and assist the foreman in building electrification works
Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Construction Electrical Works
NSQF Level	4
Credits	5
Version	5.0
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









CON/N8002: Plan and organize work to meet expected outcomes

Description

This unit describes the knowledge and the skills required for an individual to plan and organize own work in order to meet expected outcome

Scope

The scope covers the following:

- Plan and prepare for work
- Organise required resources as per work plan
- Complete work as per the plan

Elements and Performance Criteria

Plan and prepare for work

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

- **PC1.** identify the targets and timelines set by superiors
- **PC2.** determine the work requirements corresponding to task(drawings/schedules/instructions/methodology), safety, tools and equipment prior to commencement of task
- **PC3.** plan the work by analyzing the required outcomes, work procedures, allotted time, resource availability and known priorities
- **PC4.** prepare the work areas in coordination with team members
- **PC5.** plan for waste collection and disposal prior to and after completion of work

Organise required resources as per work plan

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

- **PC6.** arrange the required manpower prior to commencement of work
- **PC7.** organize the required materials, tools and tackles required for the task

Complete work as per the plan

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

- **PC8.** engage allocated manpower in an appropriate manner
- **PC9.** employ correct tools, tackles and equipment for the desired work
- **PC10.** provide guidance to the subordinates to obtain desired outcome
- **PC11.** use resources in an optimum manner to avoid any unnecessary wastage
- **PC12.** use tools, tackles and equipment carefully to avoid damage
- PC13. ensure the work processes adopted are in line with the specified standards and instructions
- **PC14.** complete the work with the allocated resources within specified time
- **PC15.** clean and organise the workplace after completion of task

Knowledge and Understanding (KU)









The individual on the job needs to know and understand:

- **KU1.** importance of proper housekeeping including safe waste disposal
- **KU2.** policies, procedures and work targets set by superiors
- **KU3.** how to identify work activities that need to be planned and organized
- **KU4.** how to determine the task requirements
- **KU5.** how to determine the quality requirements related to the task
- **KU6.** how to undertake all aspect of planning and organizing the task, including interpretation of task, reading drawing/schedules, arranging resources, reporting problems etc.
- **KU7.** how to implement the planned activities
- **KU8.** how to use available resources in a judicious and appropriate manner to minimize wastages or damage

Generic Skills (GS)

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

- **GS1.** write in one or more language, preferably the local language at the site
- **GS2.** read communication from co-workers, superiors and notices from other departments as per requirement of the level
- **GS3.** speak in one or more language, preferably one of the local language at the site
- **GS4.** follow communication shared by co-workers regarding standard work processes, resources available, timelines, etc.
- **GS5.** communicate effectively with co-workers and subordinates
- **GS6.** decide on what sequence is to be adopted for execution of work
- **GS7.** plan and organize the materials, tools, tackles and equipment required to execute the work
- **GS8.** complete all assigned task with proper planning and organizing
- **GS9.** analyze areas of work which could result in a delay of work, wastage of material or damage to tools and tackles
- **GS10.** evaluate potential solutions to minimize avoidable delays and wastages at the construction site









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Plan and prepare for work	10	20	-	-
PC1. identify the targets and timelines set by superiors	-	-	-	-
PC2. determine the work requirements corresponding to task(drawings/schedules/instructions/methodology), safety, tools and equipment prior to commencement of task	-	-	-	-
PC3. plan the work by analyzing the required outcomes, work procedures, allotted time, resource availability and known priorities	-	-	-	-
PC4. prepare the work areas in coordination with team members	-	-	-	-
PC5. plan for waste collection and disposal prior to and after completion of work	-	-	-	-
Organise required resources as per work plan	5	15	-	-
PC6. arrange the required manpower prior to commencement of work	-	-	-	-
PC7. organize the required materials, tools and tackles required for the task	-	-	-	-
Complete work as per the plan	15	35	-	-
PC8. engage allocated manpower in an appropriate manner	-	-	-	-
PC9. employ correct tools, tackles and equipment for the desired work	-	-	-	-
PC10. provide guidance to the subordinates to obtain desired outcome	-	-	-	-
PC11. use resources in an optimum manner to avoid any unnecessary wastage	-	-	-	-
PC12. use tools, tackles and equipment carefully to avoid damage	-	-	-	-
PC13. ensure the work processes adopted are in line with the specified standards and instructions	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC14. complete the work with the allocated resources within specified time	-	-	-	-
PC15. clean and organise the workplace after completion of task	-	-	-	-
NOS Total	30	70	-	-









National Occupational Standards (NOS) Parameters

NOS Code	CON/N8002
NOS Name	Plan and organize work to meet expected outcomes
Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Generic 2
NSQF Level	4
Credits	1
Version	4.0
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: 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
CON/N0608.Lay (single/three phase) cable and provide electrification for equipment at construction sites	30	70	-	-	100	20
CON/N0609.Inspect electrical maintenance of construction equipment as per requirement	30	70	-	-	100	20
CON/N0610.Carry out LV electrical wiring and assist the foreman in building electrification works	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
CON/N8002.Plan and organize work to meet expected outcomes	30	70	-	-	100	10
DGT/VSQ/N0101.Employability Skills (30 Hours)	20	30	-	-	50	10
Total	200	450	-	-	650	100









Acronyms

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 TP Training Provider / Training Partner TC Training Centre ITI Industrial Training Institute NSQC National Skill Qualification Committee NSQF National Skills Qualification 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 TP Training Provider / Training Partner TC Training Centre ITI Industrial Training Institute NSQC National Skill Qualification Committee	NOS	National Occupational Standard(s)
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 TP Training Provider / Training Partner TC Training Centre ITI Industrial Training Institute NSQC National Skill Qualification Committee	NSQF	National Skills Qualifications Framework
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 TP Training Provider / Training Partner TC Training Centre ITI Industrial Training Institute NSQC National Skill Qualification Committee	QP	Qualifications Pack
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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 TP Training Provider / Training Partner TC Training Centre ITI Industrial Training Institute NSQC National Skill Qualification Committee	PMKVY	Pradhan Mantri Kaushal Vikas Yojana
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 TP Training Provider / Training Partner TC Training Centre ITI Industrial Training Institute NSQC National Skill Qualification Committee	DDU-GKY	Deen Dayal Upadhyaya Grameen Kaushalya Yojana
JSS Jan Shikshan Sansthan STT Short Term Training RPL Recognition of Prior Learning NAPS National Apprenticeship Promotion Scheme AA Assessment Agency TP Training Provider / Training Partner TC Training Centre ITI Industrial Training Institute NSQC National Skill Qualification Committee	SANKALP	Skill Acquisition and Knowledge Awareness for Livelihood Promotion
STT Short Term Training RPL Recognition of Prior Learning NAPS National Apprenticeship Promotion Scheme AA Assessment Agency TP Training Provider / Training Partner TC Training Centre ITI Industrial Training Institute NSQC National Skill Qualification Committee	STRIVE	Skills Strengthening for Industrial Value Enhancement
RPL Recognition of Prior Learning NAPS National Apprenticeship Promotion Scheme AA Assessment Agency TP Training Provider / Training Partner TC Training Centre ITI Industrial Training Institute NSQC National Skill Qualification Committee	JSS	Jan Shikshan Sansthan
NAPS National Apprenticeship Promotion Scheme AA Assessment Agency TP Training Provider / Training Partner TC Training Centre ITI Industrial Training Institute NSQC National Skill Qualification Committee	STT	Short Term Training
AA Assessment Agency TP Training Provider / Training Partner TC Training Centre ITI Industrial Training Institute NSQC National Skill Qualification Committee	RPL	Recognition of Prior Learning
TP Training Provider / Training Partner TC Training Centre ITI Industrial Training Institute NSQC National Skill Qualification Committee	NAPS	National Apprenticeship Promotion Scheme
TC Training Centre ITI Industrial Training Institute NSQC National Skill Qualification Committee	AA	Assessment Agency
ITI Industrial Training Institute NSQC National Skill Qualification Committee	ТР	Training Provider / Training Partner
NSQC National Skill Qualification Committee	TC	Training Centre
	ITI	Industrial Training Institute
NSQF National Skills Qualification Framework	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.