

Assessment Blueprint

Assessment Overview

Sector	Construction
Job Role	Construction Electrician - LV
QP Code	CON/Q0603
Version	5.0
NSQF level	4
No. of Questions (Theory + Practical+Viva)	34+7=41
Duration (Minutes)	Theory: 60 Minutes Viva: 60 Minutes Practical: 360 Minutes
Acceptable level of variance in duration and no. of Questions Per NOS	+10%
Language	English

INSTRUCTIONS

1. Total duration of the examination is 480 Minutes (Theory: 60 Minutes + Viva: 60 Minutes + Practical: 360 Minutes)

S.No.	NOS Code	NOS Details	Question Type	Question	Option 1 (A)	Option 2 (B)	Option 3 (C)	Option 4 (D)	Correct Answer	Marks Assigned for the Question
1	CON/N0608	Lay (single/three phase) cable and provide electrification for equipment at construction sites	MCQ Type	Which cable system is commonly used for single-phase construction equipment?	Phase and neutral	Three phases only	Two earth wires	Neutral and earth	A	6
2				What should be provided to protect cables from physical damage at construction sites?	Open connections	Extra insulation tape	Loose wiring	Cable protection	D	6
3				Which device helps protect electrical equipment from earth leakage?	Contactors	MCB	Isolator	RCCB	D	6
4				What should be checked before connecting a cable to construction equipment?	Cable length only	Cable colour	Equipment paint	Cable rating	D	6
5				Why should equipment be properly earthed at construction sites?	To reduce cable length	To increase voltage	To reduce electric shock risk	To increase motor speed	C	6
6	CON/N0609	Inspect electrical maintenance of construction equipment as per requirement	MCQ Type	What should be inspected first when checking electrical equipment at a construction site?	Power cable condition	Equipment colour	Machine weight	Handle length	A	6
7				Which component should be checked for signs of overheating during electrical maintenance?	Electrical connections	Machine frame	Rubber wheels	Metal cover	A	6
8				Why should electrical equipment be inspected regularly at construction sites?	To increase machine size	To ensure safe operation	To reduce equipment weight	To change machine colour	B	6
9				What should be done if an electrical cable has damaged insulation?	Place it in water	Continue using it	Cover it with cloth	Report and replace it	D	6
10				Which device should be checked to provide protection against electrical leakage?	Prowel	Hammer	RCCB	Spanner	C	6
11	CON/N0610	Carry out LV electrical wiring and assist the foreman in building electrification works	MCQ Type	Which tool is commonly used to remove insulation from electrical wires?	Masonry trowel	Pipe wrench	Wire stripper	Claw hammer	C	6
12				What should be checked before starting LV wiring work?	Floor finish	Wall colour	Cement quantity	Wiring diagram	D	6
13				Why are wires properly secured during building electrification work?	To change wire colour	To maintain safe wiring	To increase wire length	To reduce wall height	B	6
14				What should be done before working on an electrical circuit?	Remove the earth wire	Increase the voltage	Switch off the supply	Connect extra loads	C	6
15				What should an electrician do when assisting the foreman during electrification work?	Follow work instructions	Change the wiring plan	Work without coordination	Disconnect all equipment	A	6
16	CON/N9001	Work according to personal health, safety and environment protocols at construction site	MCQ Type	Which PPE should a construction electrician wear when working at site?	Cotton cap	Safety helmet	Cloth scarf	Sun hat	B	6
17				Why should insulated tools be used during electrical work?	To increase voltage	To reduce shock risk	To improve wire colour	To reduce cable length	B	6
18				What should be done before working on an electrical circuit?	Increase the voltage	Touch the wires	Remove the earth	Switch off the supply	D	6
19				Where should damaged electrical cables be kept after removal from service?	Working pathway	Wet floor	Designated storage area	Open construction area	C	6
20				What should a worker follow to maintain safety during electrical work?	Unplanned methods	Personal shortcuts	Site safety procedures	Informal practices	C	6
21	CON/N8001	Work effectively in a team to deliver desired results at the workplace	MCQ Type	Which skill helps an electrician coordinate effectively with the work team?	Painting	Welding	Communication	Driving	C	6
22				Why should an electrician communicate with the foreman before starting assigned work?	To understand work instructions	To change work methods	To delay the work	To select materials	A	6
23				What should a worker do when a team member needs assistance?	Leave the site	Provide support	Stop working	Change the task	B	6
24				How can an electrical team complete construction work successfully?	By working separately	By working together	By delaying tasks	By changing instructions	B	6
25				What should team members do when they receive different work responsibilities?	Exchange all duties	Coordinate their tasks	Work without planning	Stop communication	B	6
26	CON/N8002	Plan and organize work to meet expected outcomes	MCQ Type	What should be identified before starting an electrical work assignment?	Tool brand	Worker uniform	Site colour	Work requirements	D	6
27				Why should an electrician prepare tools before starting the assigned work?	To change work location	To increase tool quantity	To complete work efficiently	To reduce team size	C	6
28				What helps complete electrical work within the planned time?	Proper scheduling	Random working	Delayed planning	Unclear instructions	A	6
29				What should be checked when organizing materials for electrical work?	Wall colour	Required materials	Worker age	Site decoration	B	6
30				How can expected work outcomes be achieved effectively?	By changing tasks frequently	By following a work plan	By delaying activities	By working without coordination	B	6
31	DGT/VSQ/N0101	Employability Skills (30 Hours)	MCQ Type	Which skill helps workers use computers and digital tools effectively?	Painting	Brick laying	Welding	Digital literacy	D	5
32				Why is time management important for completing workplace tasks?	It reduces working hours	It increases salary	It helps meet deadlines	It changes job roles	C	5
33				What should a worker do when facing a difficult workplace situation?	Find a suitable solution	Leave the task	Blame coworkers	Delay the work	A	5
34				Which behaviour helps create positive relationships with team members?	Respectful behaviour	Rude behaviour	Careless behaviour	Unfriendly behaviour	A	5

S.No.	NOS Code	NOS Details	Question Type	Question	Tasks to be Performed	Marks Assigned for the Question
1	CON/N0608	Lay (single/three phase) cable and provide electrification for equipment at construction sites	Structured Practical Task	Demonstrate how you would lay a three-phase cable for construction equipment.	Step 1: Check the approved drawing, load requirement, and cable size. Step 2: Inspect the three-phase cable, tools, glands, lugs, and safety equipment. Step 3: Isolate the electrical supply before beginning installation. Step 4: Lay and secure the cable along the approved protection route. Step 5: Terminate the phases, neutral, and protective conductor. Step 6: Test the installation and verify phase sequence before energizing.	70
2	CON/N0609	Inspect electrical maintenance of construction equipment as per requirement	Structured Practical Task	Demonstrate how you would check the earthing and protection system of construction equipment.	Step 1: Isolate the equipment and verify that the circuit is de-energized. Step 2: Inspect the protective conductor and earthing connection. Step 3: Check the condition of the earth terminal and bonding. Step 4: Inspect MCBs, RCCBs, fuses, and other protective devices. Step 5: Perform required earthing and protective device testing. Step 6: Record results and report any unsatisfactory conditions.	70
3	CON/N0610	Carry out LV electrical wiring and assist the foreman in building electrification works	Structured Practical Task	Demonstrate how you would install switches and socket outlets for building electrification.	Step 1: Check the drawing and identify switch and socket locations. Step 2: Isolate the circuit and verify that it is de-energized. Step 3: Prepare suitable boxes, cables, terminals, and insulation. Step 4: Install the boxes securely at the specified location. Step 5: Connect phase, neutral, and protective conductor. Step 6: Test the circuit and confirm proper operation after energizing.	70
4	CON/N9001	Work according to personal health, safety and environment protocols at construction site	Structured Practical Task	Demonstrate how you would maintain environmental safety during electrical work.	Step 1: Identify designated areas for electrical waste collection. Step 2: Separate cables, metal parts, packaging, and recycling materials. Step 3: Store electrical components and materials in designated areas. Step 4: Prevent oils, chemicals, and waste materials from spillage. Step 5: Dispose of electrical waste according to site procedures. Step 6: Clean the work area after completing the electrical work.	70
5	CON/N8001	Work effectively in a team to deliver desired results at the workplace	Structured Practical Task	Demonstrate how you would assist the foreman during building electrification work.	Step 1: Listen carefully to the foreman's instructions and safety briefings. Step 2: Review drawings and clarify the assigned electrical tasks. Step 3: Arrange required tools, cables, accessories, and equipment. Step 4: Perform assigned activities according to the approved method statement. Step 5: Report progress, material shortages, and installation issues. Step 6: Support the team in completing the electrification work.	70
6	CON/N8002	Plan and organize work to meet expected outcomes	Structured Practical Task	Demonstrate how you would plan work when materials or equipment are limited.	Step 1: Identify the materials or equipment currently available. Step 2: Determine which items are required to complete the work. Step 3: Inform the supervisor about shortages or equipment issues. Step 4: Arrange approved materials or equipment according to the schedule. Step 5: Organize the work sequence around available resources. Step 6: Complete and inspect the work according to requirements.	70
7	DGT/VSQ/N0101	Employability Skills (30 Hours)	Structured Practical Task	Demonstrate how you would solve a problem encountered during electrical work.	Step 1: Identify the problem affecting the electrical activity. Step 2: Collect relevant information about the problem. Step 3: Discuss possible solutions with the supervisor or team. Step 4: Select an approved solution according to workplace procedures. Step 5: Implement the approved solution safely and correctly. Step 6: Check the result and report the outcome.	30