



**ASSESSMENT  
MATERIAL**

**EVIDENCE  
GUIDE**

**Qualification**

LEN0123.v1

**Level: 3**

**Credit: 5**

**Version: 1**

## LEN0123B.v1 Plan work and calculate cost

### CONTENTS

1. Assessment Summary and Record
2. Candidate Assessment
3. Assessor Judgement Guide
4. List of required tools/ equipment, material and context of assessment

### ASSESSMENT AND ASSESSOR DETAILS

**Competent**

☐

**Not Yet Competent**

☐

**Assessment**

☐

**Re-Assessment**

☐

**Assessor Name:**

\_\_\_\_\_

**Assessor Code**

**Assessor Signature**

\_\_\_\_\_

**Date**

|    |  |    |  |      |  |  |  |  |  |
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### CANDIDATE DETAILS

**Candidate Name:**

First Name

Last Name

**Father Name**

\_\_\_\_\_

**Institute Name and  
District**

\_\_\_\_\_

**CNIC/BFORM #**

**OR**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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**Registration Number:**

\_\_\_\_\_

**Gender**

Male

☐

Female

☐

**Candidate Consent**

I agree to the time and date of the assessment and am aware of the requirements of the assessment. I fully understand my rights of appeal.

**Candidate Signature:**

\_\_\_\_\_

### ASSESSMENT RESULTS SUMMARY FORM

You can use this coversheet as an *Assessment Results Summary Form*. Simply post a photocopy of this completed coversheet to **NAVTTTC**

NAVTTTC OFFICE ONLY

**1. DATE  
FORM  
RECEIVED:**

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**2. DATE ENTERED INTO  
DATABASE:**

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# 1

## ASSESSMENT SUMMARY & RECORD

| CANDIDATE NAME:               |         |        |             |            | FATHER NAME:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |           |                   |
|-------------------------------|---------|--------|-------------|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------------------|
| ACTIVITY                      |         | METHOD |             |            | DESIRED OUTCOMES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | RESULT    |                   |
| NATURE OF ACTIVITY            | WRITTEN | ORAL   | OBSERVATION | PORTFOLIOS | DESIRED OUTCOMES FOR SUCCESSFUL ASSESSMENT OF COMPETENCY STANDARD: PLAN WORK AND CALCULATE COST                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | COMPETENT | NOT YET COMPETENT |
| Practical skill demonstration |         |        | ✓           |            | <ul style="list-style-type: none"> <li>Interpret drawings, sketches and specifications</li> <li>Produce drawings and sketches</li> <li>Calculate material and labour cost</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                              |           |                   |
| Knowledge Assessment          |         | ✓      |             |            | <ul style="list-style-type: none"> <li>Answer any questions your assessor may have for you during the practical skill demonstration</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |           |                   |
| Other Requirements            | ✓       | ✓      | ✓           | ✓          | <ul style="list-style-type: none"> <li>All candidate formative assessments completed by Instructor including;                             <ul style="list-style-type: none"> <li>Observations</li> <li>Demonstrations</li> <li>Questions and recorded answers</li> </ul> </li> <li>All work completed as module assignments and projects including:                             <ul style="list-style-type: none"> <li>Drawings and sketches of wiring layouts</li> <li>Calculations of materials, labour costs, input and output voltage measurements</li> </ul> </li> <li>Completed work records</li> <li>Completed learner logbooks</li> </ul> |           |                   |

# 2

## CANDIDATE ASSESSMENT

Candidate Name:

Father Name:

ALL WORK ASSESSED IN THIS COMPETENCY STANDARD MUST BE YOUR OWN WORK.

### GUIDANCE TO CANDIDATE

To meet this standard you are required to complete the following practical tasks within set timeframe:

- Interpret drawings, sketches and specifications
- Produce drawings and sketches
- Calculate material and labour cost

| ACTIVITIES                       | CANDIDATE RESPONSE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Complete practical assessment | <p>During a practical assessment, under observation by an assessor, I will correctly:</p> <p>Interpret drawings, sketches and specifications</p> <ul style="list-style-type: none"> <li>• Identify and obtain safety and other regulatory requirements as per job requirement</li> <li>• Interpret and confirm layout plan</li> <li>• Identify distribution points</li> </ul> <p>Produce drawings and sketches</p> <ul style="list-style-type: none"> <li>• Produce basic technical drawing and sketch</li> <li>• Dimension drawing and sketch correctly</li> <li>• Scale drawing and sketch</li> </ul> <p>Calculate material and labour cost</p> <ul style="list-style-type: none"> <li>• Identify location for installation</li> <li>• Estimate material requirements derived from produced drawing or sketch</li> <li>• Produce estimated overall cost for installation including labour cost</li> </ul> <p>Meet set timeframes required to plan and calculate costs for produced drawing or sketch</p> |
| 2. Complete knowledge assessment | Answer all questions my assessor may have during the practical assessment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 3. Other requirements            | <ul style="list-style-type: none"> <li>• All candidate formative assessments completed by Instructor including; <ul style="list-style-type: none"> <li>○ Observations</li> <li>○ Demonstrations</li> <li>○ Questions and recorded answers</li> </ul> </li> <li>• All work completed as module assignments and projects including: <ul style="list-style-type: none"> <li>○ Drawings and sketches of wiring layouts</li> <li>○ Calculations of materials, labour costs, input and output voltage measurements</li> </ul> </li> <li>• Completed work records</li> <li>• Completed learner logbooks</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                |

# 3

## ASSESSOR JUDGEMENT GUIDE

Candidate Name:

Father Name:

### INSTRUCTIONS FOR ASSESSOR

THIS SECTION CONTAINS MINIMUM EVIDENCE REQUIREMENTS.

The supplied electrical appliance and products requiring maintenance must meet the evidence requirements of the candidate's competence in installing electrical products and appliances

Set timeframe for practical skill demonstration must reflect the commercially viable timeframe for the tasks.

Oral questioning may be used to clarify candidate understanding of the topic and its application

| ACTIVITIES                               | MINIMUM EVIDENCE REQUIRED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | YES/NO | ASSESSOR COMMENTS |
|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-------------------|
| 1. <b>Completed practical assessment</b> | During a practical assessment, under observation by an assessor, the candidate correctly carried out:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |        |                   |
|                                          | Interpreting drawings, sketches and specifications                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |        |                   |
|                                          | <ul style="list-style-type: none"> <li>Identify and obtain safety and other regulatory requirements as per job requirement</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |        |                   |
|                                          | <ul style="list-style-type: none"> <li>Interpret and confirm layout plan</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |        |                   |
|                                          | <ul style="list-style-type: none"> <li>Identify distribution points</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |        |                   |
|                                          | Producing drawings and sketches                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |        |                   |
|                                          | <ul style="list-style-type: none"> <li>Produce basic technical drawing and sketch</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |        |                   |
|                                          | <ul style="list-style-type: none"> <li>Dimension drawing and sketch correctly</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |        |                   |
|                                          | <ul style="list-style-type: none"> <li>Scale drawing and sketch</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |        |                   |
|                                          | Calculating material and labour cost                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |        |                   |
|                                          | <ul style="list-style-type: none"> <li>Identify location for installation</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |        |                   |
|                                          | <ul style="list-style-type: none"> <li>Estimate material requirements derived from produced drawing or sketch</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |        |                   |
|                                          | <ul style="list-style-type: none"> <li>Produce estimated overall cost for installation including labour cost</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |        |                   |
|                                          | Meeting set timeframes required to plan and calculate costs for produced drawing or sketch                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |        |                   |
| 2. <b>Knowledge assessment</b>           | <p>Candidate's answers to questions are correct and demonstrate understanding of the topics and their application.</p> <p><i>Assessor to document below all questions asked and candidate answers. Use extra sheets if required and attached.</i></p>                                                                                                                                                                                                                                                                                                                                                                 |        |                   |
| 3. <b>Other requirements</b>             | <ul style="list-style-type: none"> <li>All candidate formative assessments completed by Instructor including;               <ul style="list-style-type: none"> <li>Observations</li> <li>Demonstrations</li> <li>Questions and recorded answers</li> </ul> </li> <li>All work completed as module assignments and projects including:               <ul style="list-style-type: none"> <li>Drawings and sketches of wiring layouts</li> <li>Calculations of materials, labour costs, input and output voltage measurements</li> </ul> </li> <li>Completed work records</li> <li>Completed learner logbooks</li> </ul> |        |                   |

# 4

## LIST OF TOOLS, EQUIPMENT, MATERIAL AND CONTEXT OF ASSESSMENT

|                          |                                                                                                                                                                                                                                              |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Instructions</b>      | <p>This section contains information regarding;</p> <ul style="list-style-type: none"> <li>Context of the assessment</li> <li>List of required tools and equipment.</li> <li>List of consumable items required during the service</li> </ul> |
| 1. Context of Assessment | <p>This practical skill demonstration will be conducted in a Building Electrician's lab/workshop environment</p> <p>The Assessor will select the required tools, equipment and consumables from the list below for the assessment</p>        |

| 2. List of tools and equipment required |                                 |          |
|-----------------------------------------|---------------------------------|----------|
| S. No                                   | Tools and equipment             | Quantity |
| 1                                       | Personal protective equipment   |          |
| 2                                       | Fire extinguishers              |          |
| 3                                       | First aid box                   |          |
| 4                                       | Adjustable wrench               |          |
| 5                                       | Amp meter                       |          |
| 6                                       | AVO meter                       |          |
| 7                                       | Batteries                       |          |
| 8                                       | Battery charger                 |          |
| 9                                       | Bench vice                      |          |
| 10                                      | Ceiling hole cutter             |          |
| 11                                      | Charge controller               |          |
| 12                                      | Chisel                          |          |
| 13                                      | Clamp on meter                  |          |
| 14                                      | Compass                         |          |
| 15                                      | Cutter                          |          |
| 16                                      | Drill machine                   |          |
| 17                                      | Earth tester meter              |          |
| 18                                      | Extension board                 |          |
| 19                                      | File set                        |          |
| 20                                      | First Aid box                   |          |
| 21                                      | Gloves                          |          |
| 22                                      | Goggles                         |          |
| 23                                      | Grinder                         |          |
| 24                                      | Hammer                          |          |
| 25                                      | Hand drill machine              |          |
| 26                                      | Helmet                          |          |
| 27                                      | Hertz meter                     |          |
| 28                                      | Hex saw                         |          |
| 29                                      | Knife (cable)                   |          |
| 30                                      | Level                           |          |
| 31                                      | L-key set                       |          |
| 32                                      | Lock plier                      |          |
| 33                                      | Measuring tape                  |          |
| 34                                      | Megger meter (Analog & Digital) |          |
| 35                                      | Micrometer                      |          |
| 36                                      | Multimeter                      |          |
| 37                                      | Number punch                    |          |
| 38                                      | Phase sequence meter            |          |
| 39                                      | Pipe cutter                     |          |
| 40                                      | Pipe vice                       |          |
| 41                                      | Pipe wrench                     |          |
| 42                                      | Plier set                       |          |

|    |                                       |  |
|----|---------------------------------------|--|
| 43 | Punching tool (Networking /Telephone) |  |
| 44 | Ratchet set                           |  |
| 45 | Safety boots                          |  |
| 46 | Scissor                               |  |
| 47 | Screw driver set                      |  |
| 48 | Soldering iron                        |  |
| 49 | Spanner set                           |  |
| 50 | Steel scale                           |  |
| 51 | Steel wire                            |  |
| 52 | synchronizing meter                   |  |
| 53 | Tachometer                            |  |
| 54 | Tester                                |  |
| 55 | Thimble press                         |  |
| 56 | Tong tester (clamp-on meter) AC/DC    |  |
| 57 | Torch                                 |  |
| 58 | Vernier caliper                       |  |
| 59 | Volt meter                            |  |
| 60 | Wire gauge                            |  |
| 61 | Wood saw                              |  |

| 3. List of consumable items required |                                                 |          |
|--------------------------------------|-------------------------------------------------|----------|
| S. No                                | Consumable Items                                | Quantity |
| 1                                    | Gi Pipe ½",3/4",1"                              |          |
| 2                                    | Gi fitting ½",3/4",1" (Elbow, tee, socket etc.) |          |
| 3                                    | PPRC pipe 25mm,32mm                             |          |
| 4                                    | PPRC fitting 25mm,32mm                          |          |
| 5                                    | PVC pipe 2",3",4"                               |          |
| 6                                    | U PVC 2",3",4"                                  |          |
| 7                                    | P trap 4"                                       |          |
| 8                                    | Solution PVC                                    |          |
| 9                                    | All types of valves ½"                          |          |
| 10                                   | Plastic Pipe ½",3/4",1"                         |          |
| 11                                   | Cp Fitting                                      |          |