

**ASSESSMENT
MATERIAL****EVIDENCE
GUIDE****Qualification**

LEN0142.v1

Level: 2

Credit: 13

Version: 1

**LEN0142C.v1 Perform preventive
maintenance as part of plumbing
operations****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

DD		MM		YYYY					

**CANDIDATE
DETAILS**

Candidate Name:

First Name

Last Name

Father Name

Institute Name and
District

CNIC/BFORM #

OR

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 **NAVTTC**

NAVTTC OFFICE ONLY

1. DATE

FORM
RECEIVED:

DD		MM		YYYY					

2. DATE ENTERED INTO
DATABASE:

DD		MM		YYYY					

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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: PERFORM PREVENTIVE MAINTENANCE AS PART OF PLUMBING OPERATIONS	COMPETENT	NOT YET COMPETENT
Practical skill demonstration			✓		- Plan and prepare for preventive maintenance - Perform routine inspection - Carry out preventive maintenance - Complete work		
Knowledge Assessment		✓			Answer any questions your assessor may have for you during the practical skill demonstration		
Other Requirements	✓	✓	✓	✓	- All candidate formative assessments completed by Instructor including; - Observations - Demonstrations - Questions and recorded answers - All work produced as module projects and assignments - Completed learner logbooks - Completed work records		

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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 on the following topics:

- Plan and prepare for preventive maintenance
- Perform troubleshooting
- Carry out preventive maintenance
- Complete work

ACTIVITIES	CANDIDATE RESPONSE
1. Complete practical assessment	During a practical assessment, under observation by an assessor, I will correctly: • Plan and prepare for preventive maintenance on supplied solar water heating system, including: ○ Identify and obtain safety and other regulatory requirements for maintenance ○ Interpret layout diagrams ○ Identification and selection of tools and equipment • Perform routine inspection of supplied solar water heating system, including: ○ Checks for safety hazards ○ Carrying out procedures for routine checks ○ Documenting inspection results • Carry out preventive maintenance on supplied solar water heating system, including: ○ Performing basic measurements tests ○ Performing minor adjustments and calibrations ○ Replacing worn out or damaged parts • Complete work by: ○ Complete work related documents and procedures ○ Perform final quality inspection ○ Cleaning up and storing tools, equipment and material • Meet set timeframe appropriate for supplied solar water heating system requiring preventive maintenance
2. Complete knowledge assessment	My answers to questions are correct and demonstrate my understanding of the topics and their application:
3. Other requirements	• All candidate formative assessments completed by Instructor including; ○ Observations ○ Demonstrations ○ Questions and recorded answers • All work produced as module projects and assignments • Completed learner logbooks • Completed work records

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ASSESSOR JUDGEMENT GUIDE

Candidate Name:

Father Name:

INSTRUCTIONS FOR ASSESSOR

THIS SECTION CONTAINS MINIMUM EVIDENCE REQUIREMENTS.

The supplied plumbing appliance requiring preventive maintenance must meet the evidence requirements of the candidate's competence in performing preventive maintenance on solar water heating system as part of plumbing operations.

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. Completed practical assessment	During a practical assessment, under observation by an assessor, the candidate correctly carried out:		
	• Planning and preparing for preventive maintenance on supplied solar water heating system, including:		
	○ Identifying and obtaining safety and other regulatory requirements for maintenance		
	○ Interpretation of circuit diagrams		
	○ Identification and selection of tools and equipment		
	• Performing routine inspection of supplied solar water heating system, including:		
	○ Checks for safety hazards		
	○ Carrying out procedures for routine checks		
	○ Documenting inspection results		
	• Carrying out preventive maintenance on supplied solar water heating system, including:		
	○ Performing basic measurements tests		
	○ Performing minor adjustments and calibrations		
	○ Replacing worn out or damaged parts		
	• Completing work by:		
	○ Complete work related documents and procedures		
	○ Perform final quality inspection		
	○ Cleaning up and storing tools, equipment and material		
	• Meeting set timeframe appropriate for supplied solar water heating system requiring preventive maintenance		
2. Knowledge assessment	Candidate's answers to questions are correct and demonstrate understanding of the topics and their application. <i>Assessor to document below all questions asked and candidate answers. Use extra sheets if required and attached here.</i>		
3. Other requirements	- All candidate formative assessments completed by Instructor including; - Observations - Demonstrations - Questions and recorded answers - All work produced as module projects and assignments - Completed logbooks - Completed work records		

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LIST OF TOOLS, EQUIPMENT, MATERIAL AND CONTEXT OF ASSESSMENT

Instructions	This section contains information regarding; - Context of the assessment - List of required tools and equipment. - List of consumable appliances required during the service
1. Context of Assessment	This practical skill demonstration will be conducted in a Plumber's lab/workshop environment The Assessor will select the required tools, equipment and consumables from the list below for the assessment

2. List of tools and equipment required		
S. No	Tools and equipment	Quantity
1	Adjustable wrench 6",8",12"	
2	Pipe Bender Machine Hydraulic complete set	
3	Chisel set	
4	Trowel	
5	Electric Drill machine(hammering with healti)3/4"	
6	Die (Ratchet),Die Fix 1/2,3/4,1,2	
7	Extension board 10 meter 2 core	
8	First Aid box	
9	Gloves lather, rubber	
10	Safety goggles Plastic, glass	
11	Hand Electric Grinder Electric Wall Cutter	
12	Grip plier 10"	
13	Hammer 250gm,500gm,1000gm,1500gm,2000gm	
14	Hand bit 1/4", 3/8"	
15	Helmet ABS Material	
16	Hacksaw 12" with blade	
17	Spirit Level 6",12",8"	
18	L-key set Star L key Set	
19	Measuring tape 3meter ,10 meter	
20	Pipe wrench ,10",12",14",18"	
21	Plass (pipe cutter) 1/2", 2"	
22	PPRC Heater 750W to 1000W	
23	PPR/Gi cutter 10" Gi Pipe Cutter 1/2 to 2"	
24	Safety boots(Shoes)	
25	Screw driver set 6",8",10",12"	
26	Spanner set 6mm to 24mm	
27	Testing pump (leakage) (Hand type)	
28	Tools box iron+3 draws	
29	Torch Chargeable	
30	Vice with iron stand(2nos)	
31	Compass Spring type 8"	
32	Solar Water Heater (Complete Set) Different denominations of different types	
33	Water Filling Pumps Centrifugal pump 1/2" Receproacting 1/2	
34	Pipe Insulation Material	
35	Sealing Tapes	
36	Bench Vice 5" with bench	
37	Oil Can	

38	Center Punch	
39	Wire Brush	
40	Pipe Reemar	
41	Tap Set 1/8",1/4",3/8",1/2",3/4",1" with handle	
42	Air Compressor 10 bar	
43	Tri square 6",8"	

3. List of consumable items required		
S. No	Consumable items	Quantity
1	Gi Pipe 1/2",3/4",1"	
2	Gi fitting 1/2",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 1/2",3/4",1"	
10	Plastic Pipe 1/2",3/4",1"	
11	Cp Fitting	