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073105T4PLM

PLUMBING LEVEL 5

CON/OS/PL/CR/01/5/A

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Install Water Supply System

November / December 2025

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**TVET CURRICULUM DEVELOPMENT, ASSESSMENT AND CERTIFICATION
COUNCIL (TVET CDACC)**

And Vocational College

Date: 19.11.2025 02:36 PM

WRITTEN ASSESSMENT

Time: 3 HOURS

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INSTRUCTIONS TO CANDIDATE

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1. **This paper consists of TWO sections: A and B.**

2. **Answer ALL questions in section A and ANY THREE (section B).**
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3. Marks for each question are indicated in the brackets.
4. Candidates are provided with a separate answer booklet
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5. **Do not write on the question paper.**
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This paper consists of THREE (3) printed pages

Candidates should check the question paper to ascertain that all pages are printed as indicated and that no questions are missing.

SECTION A (40 MARKS)

Attempt all the questions in this section

1. In construction sites mainly occur to the plumbers. State FOUR safety measures a plumber should observe during installation of water supply. (4 Marks)
2. Personal protective equipment are major requirements during field work or workshop. (4 Marks)
3. Tools and equipment are cared for and maintained based on manufacturer's manual and workplace policy. State FOUR reasons for maintaining equipment. (4 Marks)
4. Water storage in residential buildings is very critical as so storage is the various large holds in the buildings. State FOUR disadvantages of providing storage of hot water in buildings. (4 Marks)
5. Hot supply system installation has been on the rise due to the demand of hot water. Outline FOUR reasons of increasing tank capacity in a hot water system. (4 Marks)
6. List FOUR tools and equipment used during water supply system installation. (4 Marks)
7. Pipes are set out and marked based on working line diagrams. Outline FOUR steps of installing the pipes on the wall from the plan. (4 Marks)
8. Back siphonage is the back flow of water which may be contaminated into the drinking water. Outline FOUR ways on how this risk can be prevented. (4 Marks)
9. During threading, a plumber is supposed to have seven to eight threads. List FOUR benefits of proper threading of pipes. (4 Marks)
10. Reducing commonly used in residential, commercial and industrial settings. Outline primary functions of a pressure reducing valve in a water supply system. (4 Marks)
11. A plumber is tasked to install a service pipe across a road.
 - a State TWO methods of crossing a pipe under a road (2 Marks)
 - b Outline TWO safety measures to observe. (2 Marks)

SECTION B: 60 MARKS

Attempt THREE questions in this section

12. All mains and services for domestic water supply should be sterilized before being taken into and after being repaired

a) Describe SIX steps of sterilizing a cold-water storage system. (12 Marks)

b) Explain FOUR reasons why distributing pipes should be sterilized after repairing. (8 Marks)

13. Water distribution can be done depending on the water authority regulations.

a) Explain FOUR types of cold-water distribution systems. (8 Marks)

b) State ONE advantages of each. (4 Marks)

c) Explain FOUR precautions against frost discharge. (8 Marks)

14. A cistern must be watertight, be of adequate strength and manufactured from durable material.

a) Describe FIVE precautions necessary while installing a water cistern. (10 Marks)

b) Explain the procedure of installing a cistern inside a roof space. (10 Marks)

c) Outline TEN steps that a plumber must undertake during positioning and installing of pipes. (10 Marks)

d) State FOUR steps of bending a G.I pipe using a hydraulic bending machine. (4 Marks)

c) Outline steps of cutting G.I pipes by use of a hacksaw. (6 Marks)