

PLUMBING LEVEL 5

CON/OS/PL/CR/P05/5 Printed By: And Vocational College Date: 19.11.2025 10:55 AM
Install Water Storage Systems and Auxiliary Fittings

November/December 2025

And Vocational College Date: 19.11.2025 10:55 AM



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

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WRITTEN ASSESSMENT

Time: 3 HOURS Technical And Vocational College

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INSTRUCTIONS TO CANDIDATE

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1. This paper consists of **TWO** sections: **A** and **B**. Printed By: Technical And Vocational College Date: 19.11.2025 10:55 AM
2. Answer **ALL** questions in section A and **THREE (3)** questions in section B. Printed By: Technical And Vocational College Date: 19.11.2025 10:55 AM
3. Marks for each question are indicated in the brackets.
4. Candidates are provided with a **answer booklet**. Printed By: Technical And Vocational College Date: 19.11.2025 10:55 AM
5. Do not write on the question paper.

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This paper consists of FOUR (4) 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)

Answer ALL the questions in this section.

1. Plumbing working drawing is a technical diagram that provides all the necessary information for a plumber to install a complete plumbing system. List FOUR benefits of using the plumbing working drawings. (4Marks)
2. During installation, a plumber needs to put essential auxiliary structures State FOUR. (4Marks)
3. Storage tanks are very essential in every home during rainesting and distribution. Outline FOUR functions of a water storage tank. (4Marks)
4. When choosing a water storage tank, the material used is a critical consideration. List FOUR materials used to construct water tanks. (4Marks)
5. One form of maintenance is a response to a failure identified by a visual inspection or a test of the equipment. Outline FOUR maintenance practices for water tanks. (4Marks)
6. Water pollution particles pollute water, making it harmful to living organisms and unusable for drinking or agriculture. State FOUR causes of contamination in water tank. (4Marks)
7. Steel tanks come in many different types. Outline FOUR types of steel tanks. (4Marks)
8. Plastic has become a dominant material in modern plumbing for both water supply and drainage systems, unlike traditional metal pipes. State FOUR advantages of using plastic water tanks. (4Marks)
9. Float valve in various residential, commercial, and industrial applications to monitor water level. Outline FOUR of their functions. (4Marks)
10. Using electronic tank indicators over traditional mechanical indicators is a common practice. State FOUR uses of a level indicator in water tanks. (4Mark)

SECTION B (60 MARKS)

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11. Preparing a Bill of Quantities for a water storage system is a crucial step before commencement of works.

a. State **FIVE** parts of a Bill of Quantities

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(10Marks)

b. Explain **FIVE** ways of helping prevent cost overruns.

(10Marks)

There are number of important factors to consider when building water

12. storage tanks.

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a. Describe **SIX** main factors to consider when designing a water storage tank.

(12 Marks)

b. Explain **FOUR** factors that affect tank size.

(8 Marks)

13. A valve is a device that regulates, controls, or directs the flow of a fluid by opening, closing, or partially obstructing fluid flow.

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(10 Marks)

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(10 Marks)

14. A homeowner needs to select a pump to transfer water to his houses to higher elevation or at higher pressure.

a. Explain **FIVE** criteria for Pump Selection for water supply.

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(10 Marks)

b. Describe **TWO** advantages on an elevated tank.

(4 Marks)

c. Explain **Five** types of tests carried out in water supply system

(6 Marks)

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