

073204T4PLM

PLUMBING LEVEL 4

CON/OS/PL/CR/05/4/A

Install Water Storage Systems and Ancillary Appliances

March/April 2025



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

WRITTEN ASSESSMENT

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Date: 24.03.2025 08:16 AM

TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATE

1. This paper consists of two sections; **A** and **B**
2. Answer **ALL** the questions in each section.
3. Marks for each question are indicated in the brackets.
4. You are provided with a separate answer booklet to answer the questions
5. Do not write in this question paper

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: (10 MARKS)

Answer all questions in this section. Each question carries one mark

1. _____ is classified based on the type of service?
 - A. Displacement pump
 - B. Centrifugal pump
 - C. Deep well pump
 - D. Electric driven pump
2. Which of the following is suitable for testing a piping system for leaks in water storage?
 - A. Air
 - B. Water
 - C. Smoke
 - D. Gas
3. Which of the following is the correct classification of pumps?
 - A. Physical principle of operation
 - B. Mechanical principle of operation
 - C. Chemical principle of operation
 - D. Biological principle of operation
4. Displacement pump is classified on the basis of _____.
 - A. Mechanical operation of principle
 - B. Type of power
 - C. Type of service
 - D. Efficiency
5. The centrifugal pump has a _____ flow.
 - A. Variable
 - B. Uniform
 - C. Continuous
 - D. Constant

6. The maximum efficiency of a centrifugal pump is _____
 - A. 50%
 - B. 60%
 - C. 85%
 - D. 100%
7. Which of the following activities does not require a plumber to wear gloves?
 - A. Handling tasks that involve hot materials
 - B. Using electricity
 - C. Handling slippery objects
 - D. Using water
8. The following are factors to be considered when determining the tank material except
 - A. Size of tank
 - B. Area of usage (environment)
 - C. Availability of space/area
 - D. Manufacturers date
9. _____ controls the inlet of water into a storage tank?
 - A. Float-valve
 - B. Bib tap
 - C. Union
 - D. Gate-valve
10. How do we ensure that the ground to install the storage tanks is levelled?
 - A. Use gauge rod
 - B. Use theodolite
 - C. Use spirit levels
 - D. Use string

SECTION B: (40 MARKS)

Answer ALL questions in this section.

11. Define the term air testing. (2marks)
12. State FOUR views usually shown in construction drawings. (4marks)
13. James a plumber in Kenya want to install water tanks in a college, state FOUR general guidelines he should observe before doing pipe work. (4marks)
14. State THREE ways in which water hammer can be eliminated. (3marks)
15. Explain TWO causes of water hammer. (2marks)
16. List FOUR types of testing equipment that can be used in water storage. (4marks)
17. Give FOUR general activities are that carried out during functional testing. (4marks)
18. State FOUR properties of a liquid that must be considered before selecting type of a pump. (4marks)
19. Plumbing materials have different characteristics, List three characteristics of materials used to make cisterns. (3marks)
20. Jayden a plumber is a pump attendance. State FOUR mechanical check he performs on pumps. (4marks)
21. List FOUR supports that can be used in storage tanks. (4marks)
22. Give TWO benefits of good housekeeping practices in a workshop. (2marks)