

Pchnical And Vocational College

Date: 28.07.2025 10:43 AM

073105T4PLM**PLUMBING LEVEL 5****CON/OS/PL/CR/04/5****Install Sanitary Appliances****July/ August 2025**Printed By Technical And Vocational College
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Technical And Vocational College
**TVET CURRICULUM DEVELOPMENT, ASSESSMENT AND CERTIFICATION
COUNCIL (TVET CDACC)**

WRITTEN ASSESSMENT**TIME: 3 HOURS**Printed By Technical And Vocational College
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1. The paper consists of **TWO** sections: **A** and **B**
2. Answer **ALL** questions in section **A** and any **THREE** questions in section **B**.
3. You are provided with a separate answer booklet to answer the questions.
4. Marks for each question are as indicated in the brackets.
5. Do the question paper.

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This paper consists of THREE (3) printed pages
Candidate 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 questions in this section**

1. Personal Protective is essential to minimize occurrence of accidents in a workshop. List FOUR types of Personal Protective Equipment. (4 Marks)
2. Testing is an essential element after the installation of a sanitary system. State THREE benefits of testing a newly installed kitchen sink. (3 Marks)
3. Different materials are used in making sanitary appliances. List FOUR materials commonly used in making a water closet. (4 Marks)
4. The cost of a plumbing project can vary depending on various factors. List FOUR factors that influence the overall cost of a plumbing project. (4 Marks)
5. Buildings are required to have water storage tanks for sanitary appliance. State THREE reasons why it is recommended to have storage tanks in a building. (3 Marks)
6. A Ceramic sink is made from fired clay coated with a layer of glaze. State FOUR reasons why ceramic sinks are widely used. (4 Marks)
7. A faucet is a device used to control the flow of water from a plumbing system. List THREE causes of a leaky faucet. (3 Marks)
8. Understanding units of measurements used in the field is very vital. Convert the following units into mm;
 - a) 122 feet. (2 Marks)
 - b) 15 inches. (2 Marks)
9. Pipe threading allows a pipe to be joined securely with fittings and other pipes. List TWO types of threads that can be used when installing a shower rose. (2 Marks)
10. Plumbers use different types of drawings while fixing appliances. Define the term isometric drawing. (2 Marks)
11. Water closet and showers are plumbing fixtures installed in a bathroom as per building codes and regulations. State THREE factors that should be considered in determining the standard positioning of plumbing fixtures in a residential bathroom. (4 Marks)
12. Safety in plumbing work is critical to ensure the well-being of workers and users. State THREE safety precautions to be taken when working with plumbing tools and equipment. (3 Marks)

SECTION B: (60 Marks)

Answer any THREE questions in this section.

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13. Ceramic materials are commonly used to make sanitary appliances.

a. Explain FIVE precautions taken when installing ceramic appliances. (10 Marks)

b. Describe FIVE advantages of using ceramic material over plastic material when

making sanitary appliances (10 Marks)

14. Measure and estimate the cost of materials for the installation of a shower head given the following specifications: (20 Marks)

i. Type of shower head: Wall-mounted.

ii. Pipe Material: GI.

iii. Shower Arm Length: 8 inches.

iv. Water Pressure: Suitable for a pressure of 50-60 psi.

v. Fittings Required: Threaded fittings with Teflon tape for sealing.

vi. Wall Type: Concrete.

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vii. Distance from Water Supply: 2 meters.

15. You have been employed as a plumbing foreman for a commercial storey building being constructed in your town.

a. Explain FIVE factors you would consider when putting the

building (10 Marks)

b. Explain FIVE factors to consider when installing w.c in a commercial building.

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(10 Marks)

16. a) Material schedules are based on the plumbing system's design and specifications.

Explain FOUR reasons why material scheduling should be done when performing

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b. The last stage after the installation of a sanitary appliance is commissioning.

Discuss SIX problems that may arise during the commissioning of a newly installed

plumbing system (12 Marks)

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