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**073105T4PLM****PLUMBER LEVEL 5****CON/OS/PL/CR/0.6/5****Maintain Plumbing Systems****July/August 2025**

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

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### **WRITTEN ASSESSMENT**

**Time: 3 HOURS**

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### **INSTRUCTIONS TO CANDIDATE**

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1. **Marks for each question are indicated in the brackets.**2. The paper consists of **TWO** sections: **A** and **B**.3. Answer all questions in section **A** and any **THREE** questions in section **B**.

4. Candidates are provided with a separate answer booklet

5. **DO NOT** write on this 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)****Answer ALL the questions in this section.**

1. Plumbing system needs to be tested. Identify THREE tests you would perform on a new installation. (3 Marks)
2. A leaking elbow in a plumbing system can cause significant water losses. List THREE waterproofing materials you would use to correct the leakage. (3 Marks)
3. Plumbing faults lead to damage and malfunctioning of a system. State FOUR common signs that indicate potential plumbing system. (4 Marks)
4. Mrs. Stacy raised a complaint of leaking storage tanks a few months after installation. List THREE possible causes of the leakage. (3 Marks)
5. There are different parts in Kenya with salty water hence pipes are prone to corrosion and clogging.
  - a. State THREE maintenance that can be practiced to avoid clogging in instant shower heads. (3 Marks)
6. Tools and equipment you would use during the maintenance in (i) above. (3 Marks)
7. Plumbing materials are prone to damage after installation. State FOUR causes of mechanical damage on installed plastic pipes. (4 Marks)
8. A kitchen sink in a residential building has failed to drain waste water properly. List down the steps you would follow to troubleshoot the fault. (4 Marks)
9. App and safety risks during plumbing operations. Identify THREE risks they face while maintaining plumbing systems. (3 Marks)
10. You conducted a regular inspection in a client's home and basin was faulty. State FOUR factors that would determine whether it needs to be replaced instead of repaired. (4 Marks)
11. Tools and equipment make work easier when carrying out plumbing projects. List TWO functions of each the following tools as used in plumbing maintenance.
  - a. Adjustable Wrench. (2 Marks)
  - b. Pipe Wrench. (2 Marks)
  - c. Combination square. (2 Marks)

**SECTION B (60 MARKS)****Answer Any THREE Questions in This Section**

11.

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- a. During repair work of a water distribution system, a plumber is required to carry out functionality test on the system to guarantee the client that all is well.

Discuss FIVE potential consequences of not testing the functionality of a plumbing system. (10 Marks)

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- b. Corrosion occurs when old metal pipes rust on the inside after many years of water flow. It leads to serious problems incl breakage and even

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water contamination. Explain FIVE ways of preventing corrosion in metal pipes. (10 Marks)

12.

- a. Proper repair procedures are important for maintaining the efficiency and longevity of plumbing systems. Identify TEN steps to follow when preparing for a smooth and safe repair of a clogged kitchen sink. (10 Marks)

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- b. Water leakage leads to economic losses. Describe FIVE steps involved in fixing water leak at a pipe joint in a plumbing system. (10 Marks)

13.

- a. Air lock occurs when air is trapped in the pipe water from flowing properly. Explain FIVE preventive measures to minimize the chance of an air lock in a plumbing system. (10 Marks)

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work in challenging environments that can easily lead to potential harm or injury. Discuss protective Equipment

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that a plumber should adhere to while repairing a bathroom. (10 Marks)

14.

- a. A plumber should do price materials needed for repairs. Explain FIVE steps followed when quantifying and costing materials required for plumbing repairs. (10 Marks)

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g workshop, there are a number of tools and equipment used for different functions. Discuss FIVE classifications of plumbing tools and

equipment giving examples in each. (10 Marks)