

073105T4PLM

PLUMBER LEVEL 5

CON/OS/PL/CR/04/5/A

INSTALL SANITARY APPLIANCES

July/ August 2024



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

WRITTEN ASSESSMENT

TIME: 3 HOURS

INSTRUCTIONS TO CANDIDATE

1. The paper consists of **TWO** sections: **A** and **B**
2. Answer **ALL** questions as guided in each section.
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 not write on the question paper.

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 from this section

1. Understanding the distinction between soil appliances and waste appliances is fundamental in plumbing installations. Differentiate between soil appliances and waste appliances as used in plumbing installation work. (4 Marks)
2. Plumbers use different types of drawings while fixing sanitary appliances. What do you understand by the term isometric drawing? (2 Marks)
3. Plumbers install different types of wash hand basin according to engineering design or client's preferences. Name THREE types that may be used. (3 Marks)
4. Having a storage water tank is highly recommended in a commercial building. Outline FOUR reasons why it is recommended to have a storage tank in a building. (4 Marks)
5. Sanitary appliances are used to discharge waste from a building. Outline FOUR examples of soil sanitary appliances used in a plumbing. (4 Marks)
6. Traps are used to hold water to prevent foul smell from entering the building. Highlight THREE types of traps used during installation of sanitary appliances in a residential building. (3 Marks)
7. Personal Protective Equipment are needed in a workshop to minimize occurrence of accidents in a workshop. List any FOUR types of Personal Protective Equipment needed. (4 Marks)
8. Urinals are used to reduce congestion in male toilets. Highlight TWO types of urinals that are commonly used in plumbing works. (2 Marks)
9. Ball valves are used to stop water from entering the tank when full. Give THREE advantages of using ball valves in installation of a water tank. (3 Marks)
10. Different materials are used in making sanitary appliances. List THREE materials commonly used in making a sink. (3 Marks)
11. Tools become handy when installing sanitary appliances. Outline FOUR tools that are used during installation of a water closet. (4 Marks)
12. Understanding units of measurements used in the field is very vital. Convert the following units into mm;
 - a. 122 feet. (2 Marks)
 - b. 15inches. (2 Marks)

SECTION B: (60 Marks)

*Answer any **THREE** questions in this section.*

13. You have been employed as a plumbing foreman for commercial storey building being constructed in your town.
- a. Explain FIVE factors you will consider when purchasing sanitary appliances for the building. (10 Marks)
 - b. Explain FIVE properties of a good sanitary appliances to be installed in the commercial building. (10 Marks)
14. You have been employed in a busy plumbing hardware as a sales person in the field for the sanitary appliances.
- a. With the aid of a sketch, describe the following appliances to clients
 - i. Wash Hand Basin. (3 Marks)
 - ii. Kitchen Sink. (3 Marks)
 - iii. Bidet. (3 Marks)
 - iv. Bathtub. (3 Marks)
 - b. Describe any FOUR types of a water closet you might propose to a client constructing an apartment. (8 Marks)
15. Ceramic materials are commonly used to make sanitary appliances.
- a. Explain FIVE precautions taken when installing the sanitary appliances. (10 Marks)
 - b. Describe FIVE advantages of using ceramic material over plastic material when making sanitary appliances. (10 Marks)
16. You have been tasked by your employer to fix sanitary appliances in her workplace.
- a. Explain any THREE types of vices you may use while making the installations. (6 Marks)
 - b. Elaborate THREE methods you may use to test for leakages. (6 Marks)
 - c. Describe FOUR reasons why material scheduling is necessary when performing this plumbing works. (8 Marks)

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