

073204T4PLM

PLUMBING LEVEL 4

CON/OS/PL/CR/04/4/A

Install Sanitary Appliances

Nov/Dec 2024



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

WRITTEN ASSESSMENT

Time: 2 HOURS

INSTRUCTIONS TO CANDIDATE

1. This paper consists of two sections; **A** and **B**
2. Answer **ALL** the question as guided in each section
3. Marks for each question are as 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 SIX (6) 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. Before installing a sanitary appliance, a plumber must carefully study the plumbing drawings and understand all installation procedure from the manufacturer. What should you look for in a detail drawing when installing a faucet?
 - A. Faucet style and colour.
 - B. Dimensions of the mounting holes and connections.
 - C. Warranty from the manufacturer.
 - D. The faucet's user manual.
2. Sanitary appliances are made of different materials to suit different uses or applications. What is the main advantage of using ceramic as a material for sanitary appliances?
 - A. Lightweight and easy to use.
 - B. Ceramics are easily recyclable.
 - C. High resistance to corrosion and staining.
 - D. Ceramics are highly absorbent and hygienic.
3. It is good practice for a plumber to quantify all plumbing materials and equipment before procuring them. In which of the following ways can failing to accurately quantify supplies affect the project?
 - A. Incomplete installation leading to potential rework and additional costs.
 - B. More efficient use of storage and handling materials.
 - C. Reduced overall labour hours needed to complete the project.
 - D. Increased client satisfaction due to better material handling.
4. A good architectural drawing must give clear communication and instructions to the plumber. When installing a bidet, what information should be verified from the working drawings?
 - A. The bidet brand.
 - B. Exact location and connection points for water supply and drainage.
 - C. The bidet durability.
 - D. Client's cultural affiliation.
5. During plumbing works, good housekeeping practices is highly emphasized. What is the best practice for handling debris during installation of sanitary appliances.

- A. Sweep debris into the nearest drain to dispose it quickly and minimize accidents.
 - B. Leave debris where it is to avoid interrupting the work.
 - C. Pile up debris in a corner until the end of the job.
 - D. Continuously collect and dispose of debris in designated waste containers.
6. A toilet cistern contains several components that work together to store and release water for flushing. Which of the following components is not found inside a toilet flush cistern?
- A. Fill valve.
 - B. Syphon mechanism.
 - C. Shut-off valve.
 - D. Over flow tube.
7. Debris, human hair and soap scum can block the water ways of a bathtub after a long period of time. What is the common sign that the bathtub drain might be clogged.
- A. Water drains quickly.
 - B. Black stains on the bathtub surface.
 - C. Water draining slowly or not at all.
 - D. Water hammering from the bathtub strainer.
8. A double kitchen sink is a type of a sink designed with two separate basins allowing for simultaneous use for different tasks. What is the standard overall length of a double kitchen sink?
- A. 760 mm.
 - B. 910 mm.
 - C. 1070 mm.
 - D. 1220 mm.
9. Routine cleaning of sanitary appliances is best practice to ensure high standards hygiene are maintained. What should you use to clean a porcelain sink without damaging the surface?
- A. Mild soap and soft cloth.
 - B. Abrasive scrubbing pads.
 - C. Steel wool
 - D. Harsh chemical cleaners.

10. After installing a sanitary appliance, a plumber must perform a very important activity before commissioning. As a plumber, what should you check after installing a kitchen sink to ensure proper operations?

- A. Sink aesthetics.
- B. Faucet handle appearance.
- C. Sink colour matching with cabinetry.
- D. Water flow and drainage.

easytvet.com

SECTION B (40 MARKS)

Answer ALL questions in this section.

11. Water closet is installed to receive human excreta directly from the user and is connected through a suitable trap to the soil pipe. Name the TWO common water closets used in residential houses. (2 Marks)
12. A faucet is a common device found in most sanitary appliances including a wash hand basin. What is the main function of a faucet? (2 Marks)
13. Installing a sanitary appliance refers to the process of fitting and connecting a sanitary fixture used for sanitation purposes. List any THREE advantages of installing a sanitary appliance as per standard procedure of design. (3 Marks)
14. Backflow in sanitary appliances occurs when contaminated water or waste water flows in the reverse direction and mixing with the clean water supply. What are the THREE common causes of backflow in domestic sanitary appliances. (3 Marks)
15. Water closet located at a long distance from the stack is more susceptible to siphonage than when they are installed closer to each other. Give FOUR factors that causes back siphonage as a result of this scenario? (4 Marks)
16. A trap is a component in plumbing that is installed in a kitchen sink, WC, WHB or a bath tub.
 - a) Which type of trap do you consider best for a bath tub. (1 Mark)
 - b) Give TWO reasons why you consider the trap in question 16 a) above suitable for bath tub connections? (2 Marks)
17. Modern water closets (WCs) offer several advantages over old styles water closet. Highlight FOUR advantages of the modern water closet over the old-style water closet. (4 Marks)
18. Testing the functionality of a sanitary appliance after installation is an important step in plumbing works. Give FOUR reasons why it is important to conduct functionality tests before commissioning. (4 Marks)
19. With a properly trapped sink, the bell on the sink strainer should be correctly fitted, regularly cleaned and inspected for damages. What are the THREE functions of a sink strainer bell in a kitchen sink? (3 Marks)

20. Installing a wash hand basin involves several important steps that should be followed in order to come up with a functional, safe and aesthetic product. What are the steps to be followed when installing a new wall mounted wash hand basin. (7 Marks)
21. Urinals come in several types, each designed for different needs and applications. What are the THREE types of urinals used in public and domestic buildings in Kenya? (3 Marks)
22. Bathroom accessories are various items and fittings used in a bathroom to enhance functionality and convenience. Name any FOUR accessories found in a bathroom setup. (2 Marks)

easytvvet.com

THIS IS THE LAST PRINTED PAGE.