

TECHNICAL



UNIVERSITY OF

MOMBASA

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SCHOOL OF ENGINEERING AND TECHNOLOGY  
DEPARTMENT OF BUILDING & CIVIL ENGINEERING  
**UNIVERSITY EXAMINATION FOR:**

DIPLOMA IN CIVIL ENGINEERING

**DCE 2111: WORKSHOP TECHNOLOGY (PLUMBING)**

END OF SEMESTER EXAMINATION  
**SERIES: AUGUST 2024**  
**TIME: 2 HOURS**

**Instructions to Candidates**

You should have the following for this examination

*-Answer Booklet, examination pass and student ID*

This paper consists of **five** questions. Attempt any **THREE** questions.

**Do not write on the question paper.**

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**QUESTION ONE (20 MARKS)**

- (a) Name and describe the two-drainage system in use (10 Marks)
- (b) Name five principles of a good drainage (10 Marks)

**QUESTION TWO (20 MARKS)**

- (a) Name five tools for mild steel pipe work and their uses (10 Marks)
- (b) With a well labelled diagram outline the direct cold water system (10 Marks)

**QUESTION THREE (20 MARKS)**

- (a) Give five workshop rules and regulations (5 Marks)

(b)List five tools used for sheet metal work and their uses (5 Marks)

(c) Outline five types of sheet metal joints (5 Marks)

(d) Give five types of pipes used in drainage works (5 Marks)

**QUESTION FOUR (20 MARKS)**

(a)Outline three methods used in mild steel pipe jointing (6 Marks)

(b)Outline how a PPR pipe is made (6 Marks)

©With an aid of a diagram explain the in direct system of cold water supply ( 8 Marks)

**QUESTION FIVE (20 MARKS)**

(a)Give three disadvantages of direct cold water supply (6 Marks)

(b)Explain how the service is laid below ground level in water supply ( 6 Marks)

©Outline six factors used in the selection of pipe material (8 Marks)