



TECHNICAL UNIVERSITY OF MOMBASA

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: APRIL 2025
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.

QUESTION ONE (20 Marks)

- (a) Using drawings outline the use of six wooden tools for sheet metal work. (16 Marks)
- (b) With illustrations, outline the use of wheel Cutler and a die stock. (4 Marks)

QUESTION TWO (20 Marks)

- (a) Using a well labelled diagram explain the direct supply of cold water system. (10 Marks)
- (b) Using illustrations outline the separate drainage system. (10 Marks)

QUESTION THREE (20 Marks)

- (a) Outline how a water supply pipe is laid in the ground. (12 Marks)
- (b) What is a drain. (2 Marks)
- (c) Name three types of pipes used in drainage works (6 Marks)

QUESTION FOUR (20 Marks)

- (a) Outline the three types of joints used in mild steel pipe works. (6 Marks)
- (b) Illustrate with a well-labelled diagram the indirect supply of cold water system. (8 Marks)
- (c) Give the three setbacks of direct water supply. (6 Marks)

QUESTION FIVE (20 Marks)

- (a) Using illustrations outline the combined drainage system. (8 Marks)
- (b) Outline the characteristics of a good drainage system. (6 Marks)
- (c) What are the characteristics of a good water supply pipe. (6 Marks)