



TECHNICAL UNIVERSITY OF MOMBASA

SCHOOL OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF ARCHITECTURE & BUILT ENVIRONMENT

UNIVERSITY EXAMINATION FOR:
DIPLOMA IN ARCHITECTURE
EAR 2208: BUILDING TECHNOLOGY III
END OF SEMESTER EXAMINATION
YEAR TWO SEMESTER TWO

SERIES: MAY 2025

TIME: 2 HOURS

DATE: MAY, 2025

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 question ONE (Compulsory) and any other TWO questions.

Do not write on the question paper.

QUESTION ONE (30 MARKS)-COMPULSORY

- a) Define the following terminologies.
 - i. Excavation. (2 marks)
 - ii. Hot rolling. (2 marks)
 - iii. Cladding. (2 marks)
- b) Describe TWO methods of steel frame connections. (4 marks)
- c) State FIVE method of soil removal. (5 marks)
- d) Explain FIVE benefits of a concrete framed building. (10 marks)
- e) List FIVE functions of paints. (5 marks)

QUESTION TWO (15 MARKS)

- a) State FIVE properties of paints. (5 marks)
- b) Describe the step by step process of painting. (10 marks)

QUESTION THREE (15 MARKS)

- a) Using appropriate sketches, describe FIVE types of portal frames. (15 marks)

QUESTION FOUR (15 MARKS)

- a) State TWO purposes of cladding. (2marks)
- b) Giving an example for each, name TWO classification of cladding. (3 marks)
- c) Describe FIVE types of cladding systems. (10 marks)

QUESTION FIVE (15 MARKS)

- a) With the aid of a sketch, describe the components of a pile foundation. (6 marks)
- b) State FIVE situation that merit the use of a pile foundation. (5 marks)
- c) Giving an example for each, State TWO classification of pile foundation. (4 marks)