



# TECHNICAL UNIVERSITY OF MOMBASA

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SCHOOL OF ENGINEERING AND TECHNOLOGY  
DEPARTMENT OF ARCHITECTURE & BUILT ENVIRONMENT

**UNIVERSITY EXAMINATION FOR:**  
**DIPLOMA IN ARCHITECTURE**  
**DIPLOMA IN QUANTITY SURVEYING**  
**EAR 2106 BUILDING TECHNOLOGY I**  
**SPECIAL & SUPPLEMENTARY EXAMINATION**  
**YEAR ONE SEMESTER TWO**

**SERIES: JULY 2025**

**TIME: 2 HOURS**

**DATE: JULY, 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.**

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**QUESTION ONE (30 MARKS)-COMPULSORY**

- a) With TWO examples for each, List down TWO classification of pile foundations. (6 marks)
- b) Describe FIVE merits of site accommodation. (10 marks)
- c) State FIVE functional requirements of a building. (5 marks)
- d) With the aid of sketches, draw TWO types of trussed rafters. (4 marks)
- e) Define:

- i. Formwork. (2 marks)
- ii. Site notice. (2 marks)
- iii. Hardcore. (1 mark)

**QUESTION TWO (15 MARKS)**

- a) Define the term scaffolding. (2 marks)
- b) Describe the TWO main components of a scaffold. (4 marks)
- c) Describe TWO types of scaffolding. (4 marks)
- d) State TWO functional requirements for scaffolding. (2 marks)
- e) List THREE materials used for scaffolding. (3 marks)

**QUESTION THREE (15 MARKS)**

- a) State FIVE factors affecting the selection of floor finishes. (5 marks)
- b) List FOUR function of a floor finish. (4 marks)
- c) Describe THREE types of floor finish. (6 marks)

**QUESTION FOUR (15 MARKS)**

- a) State FIVE significance of a wall. (5 marks)
- b) With the aid of diagrams, define FOUR types of walls. (10marks)

**QUESTION FIVE (15 MARKS)**

Foundation is the lowest part of the building or the civil structure that is in direct contact with the soil which transfers loads from the structure to the soil safely. With the aid of appropriate sketches describe FIVE types of foundations. (15 marks)