



TECHNICAL UNIVERSITY OF MOMBASA

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
END OF SEMESTER EXAMINATION
YEAR ONE 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) Describe TWO types of site levelling. (4 marks)
- b) State THREE design requirements of a foundation. (3 marks)
- c) Describe TWO methods of building. (4 marks)
- d) Describe FOUR types of roofs. (8 marks)
- e) List FIVE functional requirements of floors. (5 marks)

- f) Define:
- i. Site Accommodation. (2 marks)
 - ii. Temporary works. (2 marks)
 - iii. Floor Finish. (2 marks)

QUESTION TWO (15 MARKS)

- a) State FIVE purposes of a foundation. (5 marks)
- b) Raft foundation is an example of a type of foundation, define the term raft foundation. (1 mark)
- c) Using appropriate drawings, describe THREE ways to protect the edges of a raft foundation. (9 marks)

QUESTION THREE (15 MARKS)

- a) With the aid of a pitched roof section, show TEN components of a roof. (10 marks)
- b) State FIVE functional requirements of a roof. (5 marks)

QUESTION FOUR (15 MARKS)

- a) Floors are one of the major components of a structure or building, define the term floors. (2 marks)
- b) State TWO main types of floors. (2 marks)
- c) Describe THREE types of reinforced concrete upper floor. (6 marks)
- d) With the help of a drawing, name THREE main components of a suspended timber ground floor. (5 marks)

QUESTION FIVE (15 MARKS)

- a) Apart of strength and stability, Name FIVE other functional requirement of a wall. (5 marks)
- b) Describe FOUR types of walls. (8 marks)
- c) State TWO classification of walls. (2 marks)