



**TECHNICAL UNIVERSITY OF MOMBASA**

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FACULTY OF ENGINEERING & TECHNOLOGY  
DIPLOMA IN BUILDING AND CIVIL ENGINEERING

END OF SEMESTER EXAMINATIONS

MAY 2016

**EBC 2109: BUILDING TECHNOLOGY I**

Instructions: Answer any **THREE** questions.

Use neat well labelled sketches where required.

**Time: 2 hours**

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**QUESTION ONE**

- a) Explain the role of the following in the construction process
  - 1. Architect
  - 2. Structural Engineer
  - 3. Quantity Surveyor
  - 4. The Client
  - 5. The clerk of works (10 marks)
- b) Define quality control as applied in construction works (2 marks)
- c) Outline FOUR reasons for quality control in construction works (8 marks)

**QUESTION TWO**

- a) Outline FIVE reasons for carrying out site investigation (5 marks)
- b) Define the term foundation and state THREE purposes for its construction (5 marks)
- c) Outline FOUR major types of foundations (10 marks)

**QUESTION THREE**

- a) Briefly explain the evolution of built environment (10 marks)
- b) Outline FIVE factors that determine the nature of built environment (5 marks)
- c) Briefly outline the building construction process (5 marks)

**QUESTION FOUR**

- a) Draw a wall opening and indicate the following:
  - 1. Soffit
  - 2. Reveal

3. Jamb
4. Sill
5. Head

(20 marks)

#### **QUESTION FIVE**

- a) State FOUR equipment used on construction site during setting out (2 marks)
- b) Outline FOUR functional requirements of floors (2 marks)
- c) Outline FOUR types of stairs (2 marks)
- d) Outline FOUR factors that influence the choice of a roof structure (4 marks)
- e) Draw and label a ledged, braced and battened door (10 marks)