



TECHNICAL UNIVERSITY OF MOMBASA

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

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)