



**TECHNICAL UNIVERSITY OF MOMBASA**

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**FACULTY OF ENGINEERING AND TECHNOLOGY**

**DEPARTMENT OF BUILDING AND CIVIL ENGINEERING**

**DIPLOMA IN BUILDING AND CIVIL ENGINEERING**

**EBC 2107: BUILDING TECHNOLOGY I-1**

**END OF SEMESTER EXAMINATION**

**SERIES: AUGUST 2019**

**TIME: 2 HOURS**

**INSTRUCTIONS TO CANDIDATES**

You should have the following for this examination

- Answer booklet
- Scientific calculator

This paper consists of **FIVE** questions

Answer any **THREE** questions

Use neat, large and well labeled diagrams where required

Maximum marks for each part of a question are as shown

This paper consists of **TWO** printed papers.

Do not write on this Examination Paper.

### 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) State **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) State **FOUR** major types of foundations (10 marks)

### QUESTION THREE

- a) Briefly explain the evolution of built environment (10 marks)
- b) State **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) List **FOUR** functional requirements of floors (2 marks)
- c) List out **FOUR** types of stairs (2 marks)
- d) State **FOUR** factors that influence the choice of a roof structure (4 marks)
- e) Draw and label a ledged, braced and battened door (10 marks)