



TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

DIPLOMA IN BUILDING AND CIVIL ENGINEERING

EBC 2107: BUILDING TECHNOLOGYI- 2

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.

QUESTION ONE

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

QUESTION TWO

- 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 THREE

- 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 (5 marks)
- d) Define the term setting out and list **SIX** tools used to carry it out (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 (4 marks)
- d) Outline **THREE** factors that influence the choice of a roof structure (2marks)
- e) Draw and label a ledged, braced and battened door (10 marks)