



THE TECHNICAL UNIVERSITY OF MOMBASA

# Faculty of Engineering & Technology

DEPARTMENT OF BUILDING & CIVIL ENGINEERING  
CERTIFICATE IN BUILDING & CIVIL ENGINEERING (DBC 12S)

EBC 1107: BUILDING TECHNOLOGY I

**SPECIAL/SUPPLEMENTARY EXAMINATION**  
**SERIES: FEBRUARY 2013**  
**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  
Maximum marks for each part of a question are as shown

This paper consists of **THREE** printed pages

### **Question One**

a) Define the following terms:

- (i) Plastering
- (ii) Curing
- (iii) Mortar
- (iv) Concrete
- (v) Form work

**(10 marks)**

b) Sketch and label the parts of a solid ground floor.

**(10 marks)**

### **Question Two**

a) Explain the roles of the following in a construction industry.

- (i) Architect
- (ii) Structural engineer
- (iii) Quantity surveyor

**(10 marks)**

b) Sketch and label the parts of the following:

- (i) Flint wall
- (ii) Reinforced monolithic wall
- (iii) Cavity wall
- (iv) Rubble wall

**(10 marks)**

### **Question Three**

a) With the aid of sketches, describe the following types of foundations.

- (i) Raft foundation
- (ii) Pad
- (iii) Strip
- (iv) Wide strip

**(10 marks)**

b) With the aid of sketches, outline the importance of bonding in wall construction.

**(10 marks)**

### **Question Four**

a) Outline the history of building in relation to human creation.

**(10 marks)**

b) Differentiate the following:

- (i) Plastering from Rendering
- (ii) Jointing from Pointing
- (iii) Mortar from Concrete
- (iv) Inception from Conception
- (v) Blocks from Bricks

**(10 marks)**

### **Question Five**

- a) Explain **FIVE** factors to consider when selection floor finishers. **(10 marks)**
- b) (i) Sketch a plan of a rectangular building and indicate the positions of profile boards.
- (ii) Sketch and label the parts of a corner profile board. **(10 marks)**