



# THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of JKUAT)

*Faculty of Engineering and Technology*

DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

**CERTIFICATE IN BUILDING TECHNOLOGY I**

**EBC 1108: BUILDING TECHNOLOGY II**

**END OF SEMESTER EXAMINATION**

SERIES: DECEMBER 2011

**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 question **ONE (COMPULSORY)** from **SECTION A** and any other **TWO** questions from **SECTION B**

Maximum marks for each part of a question are clearly shown

This paper consists of **TWO** printed pages

## SECTION A (COMPULSORY)

### Question 1

- a) Sketch and label the parts of a timber stair (10 marks)
- b) Sketch and label the parts of a dogleg timber stair (5 marks)
- c) With the aid of sketches, outline the construction of:
  - (i) Panel door
  - (ii) Ledged and battened door (15 marks)

## SECTION B (Answer any TWO questions from this section)

### Question 2

- a) Explain the importance of soil study in building technology (6 marks)
- b) With the aid of sketches, differentiate Door frame from Door lining (10 marks)
- c) Sketch the following types of hinges
  - (i) Butt
  - (ii) Parliamentary (4 marks)

### Question 3

- a) State **FOUR** functional requirement of a window (4 marks)
- b) Sketch and label **FOUR** types of roofs (16 marks)

### Question 4

- a) Sketch and label the parts of Dependent scaffolding (8 marks)
- b) Explain the importance of safety in a construction site (8 marks)
- c) Describe the indirect cold water system (4 marks)

### Question 5

- a) Describe **FOUR** types of roof coverings (10 marks)
- b) Sketch and label the parts of a double drainage system (10 marks)