



**THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE**

**(A Constituent College of JKUAT)**

(A Centre of Excellence)

# **Faculty of Engineering & Technology**

DEPARTMENT OF BUILDING & CIVIL ENGINEERING  
CERTIFICATE IN BUILDING & CIVIL ENGINEERING

EBC 1109: BUILDING TECHNOLOGY II

**SPECIAL/SUPPLEMENTARY EXAMINATION**

**SERIES: OCTOBER 2012**

**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 **TWO** printed pages

**Question One (20 Marks)**

- a) Sketch the following:
- i) Dogleg stair
  - ii) Stair well
  - iii) Straight flight stair
  - iv) Winder
- (10 marks)**
- b) With the aid of sketches, describe **FOUR** types of roofs. **(10 marks)**

**Question Two (20 Marks)**

- a) Differentiate the following:
- i) Iron dog from screw
  - ii) Hinges from mortise lock
  - iii) Dowel from punch
- (6 marks)**
- b) State **FOUR** functional requirements of windows. **(4 marks)**
- c) With the aid of sketches, differentiate Door frame from door lining. **(5 marks)**
- d) Sketch and label the parts of a wall opening. **(5 marks)**

**Question Three (20 Marks)**

- a) Sketch the following door furniture.
- i) Parliament hinge
  - ii) Tee hinge
  - iii) Strap hinge
  - iv) Counter sunk screw
- (10 marks)**
- b) Sketch and label the parts of:
- i) Casement window
  - ii) Pivoted window
- (10 marks)**

**Question Four (20 marks)**

- a) With the aid of sketches, differentiate Dependent Scaffolding from Independent Scaffolding. **(10 marks)**
- b) Explain temporary works as used in building technology. **(10 marks)**

**Question Five (20 marks)**

- a) Outline the roles of a building supervisor in a construction site. **(10 marks)**
- b) Outline the procedure of designing a timber stair (Rise and Tread) **(10 marks)**