



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)**