



# THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of Jkuat)

*Faculty of Engineering and Technology*

DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

**DIPLOMA IN BUILDING & CIVIL ENGINEERING  
DIPLOMA IN ARCHITECTURE**

EBC 2208: BUILDING TECHNOLOGY II

**END OF SEMESTER EXAMINATION**

SERIES: AUGUST/SEPTEMBER 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** and any other **TWO** questions

Maximum marks for each part of a question are as shown

This paper consists of **TWO** printed pages

## SECTION A (COMPULSORY)

### Question 1

- a) With the aid of sketches, explain the following types of carpenter's second fixing
- (i) Architrave
  - (ii) Skirting
- b) With the aid of a sketch, explain the construction of a cavity wall (10 marks)
- c) State **FOUR** causes of failure of a chimney (4 marks)

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

### Question 2

- a) Sketch and label the parts of a formwork to a beam (10 marks)
- b) Sketch and label the parts of Bloom base (6 marks)
- c) State **FOUR** advantages of framed structures (4 marks)

### Question 3

- a) With the aid of sketch, explain the self centering upper floor (10 marks)
- b) Sketch and label the parts of a flint return rubble wall (6 marks)
- c) State **FOUR** areas where pre-cast units may be used in construction (4 marks)

### Question 4

- a) State **FOUR** painting techniques (4 marks)
- b) Outline the working of Fire place (6 marks)
- c) Sketch a typical splice detail of a Pcc portal frame (10 marks)

### Question 5

- a) With the aid of sketches, explain the construction of a reinforced concrete column to a height of one metre above solid ground floor. (14 marks)
- b) Define the following:
- (i) Curtain walling
  - (ii) Curing
  - (iii) Cladding
- (6 marks)