



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

INSTITUTIONAL BASED PROGRAMME

EBC 2208: 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 (30 marks)

- a) With the aid of sketches, explain the following types of carpenter's second fixing
- (i) Architrave
 - (ii) Skirting
 - (iii) Door lining
- (16 marks)
- b) With the aid of a sketch, explain the construction of a Cavity wall (6 marks)
- c) With the aid of a sketch, outline the working of a fireplace (8 marks)

SECTION B (Answer any TWO questions from this section)

Question 2 (20 marks)

- a) With the aid of a sketch, outline the fixing of a door panel to a door lining (10 marks)
- b) Sketch and label the parts of a Bloom base (6 marks)
- c) State **FOUR** advantages of Pre cast reinforced concrete units (4 marks)

Question 3 (20 marks)

- a) With the aid of a sketch, explain the non self centering upper floor (10 marks)
- b) Sketch and label the parts of rubble polygonal wall (6 marks)
- c) Sketch a typical splice detail of a Pre cast concrete portal frame (10 marks)

Question 4 (20 marks)

- a) State **FOUR** painting techniques (4 marks)
- b) Explain the importance of soil study in Building technology (6 marks)
- c) Sketch a typical splice detail of a Pre cast concrete portal frame (10 marks)

Question 5 (20 marks)

- a) With the aid of sketches, explain the construction of a pad foundation in framed structures (12 marks)
- b) Define the following:
- (i) Masonry wall
 - (ii) Curing
 - (iii) Reinforced concrete
 - (iv) Workability of concrete
- (8 marks)