



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 II

EBC 1119: BUILDING TECHNOLOGY IV

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 form work to a lintel (10 marks)
- b) State **FIVE** functional requirements of a wall (5 marks)
- c) With the aid of sketches, outline the construction of:
- (i) Cavity wall
 - (ii) Flint rubble wall (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, explain the construction of non self supporting upper floor (10 marks)
- c) State **FOUR** advantages of self supporting upper floor over insitu upper floor (4 marks)

Question 3

- a) With the aid of sketches, explain the finishing of external walls by using different types of facings (16 marks)
- b) State **FOUR** advantages of reinforced concrete structures (4 marks)

Question 4

Explain:

- (i) The construction of timber walls
 - (ii) Plastering of timber wall (15 marks)
- a) Explain the importance of safety in a construction site (5 marks)

Question 5

- a) With the aid of sketches explain the construction of curtain walls (10 marks)
- b) Explain the procedure of constructing an upper floor finish using mortar (10 marks)