



# THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of Jkuat)

*Faculty of Engineering and Technology*

DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

**CERTIFICATE IN BUILDING CONSTRUCTION**

EBC 1107: BUILDING TECHNOLOGY I

**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) Explain the **FOUR** processes to be followed when constructing a building (10 marks)
- b) Name the personnel involved in the building industry (5 marks)
- c) Sketch and label the parts of a profile board (10 marks)
- d) Sketch a plan of a rectangular building and indicate the position of profile boards (5 marks)

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

### Question 2

- a) Explain the role of each of the following (15 marks)
  - (i) Architect
  - (ii) Structural engineer
  - (iii) Quantity surveyor
- b) Explain the importance of site investigation (5 marks)

### Question 3

- a) Explain the process of setting out a rectangular building by using the 3:4:5 method (10 marks)
- b) (i) Name **SIX** types of foundations
- (ii) With the aid of sketches, describe the pad foundation (10 marks)

### Question 4

- a) Sketch and label the parts of a solid ground floor (15 marks)
- b) Explain the use of the following (5 marks)
  - (i) Hardcore
  - (ii) Blinding

### Question 5

- a) Explain the history of building (5 marks)
- b) Explain the factors that influence the choice of a floor finish (10 marks)
- c) Name **FIVE** building materials used in your home area (5 marks)