



# 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 I

EBC 1101: CONSTRUCTION MATERIAL I

SPECIAL/SUPPLEMENTARY EXAMINATION

SERIES: MAY/JUNE 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. Question **ONE** is compulsory

Maximum marks for each part of a question are clearly shown

This paper consists of **TWO** printed pages

**Question 1 (Compulsory - 20 marks)**

- a) State **FOUR** different types of construction materials (4 marks)
- b) Outline why stones are gradually losing their universal use as a building material (6 marks)
- c) Explain the geological classification of rocks (10 marks)

**Question 2 (20 marks)**

- a) Outline **FIVE** good characteristics of building stones (10 marks)
- b) Sketch **FIVE** forms of dressing stones (10 marks)

**Question 3 (20 marks)**

- a) Explain the process of making bricks (10 marks)
- b) Outline the use of the **FOUR** types of bricks (10 marks)

**Question 4 (20 marks)**

- a) State **FOUR** qualities of a good bricks for building (10 marks)
- b) Sketch **FIVE** defects in timber (10 marks)

**Question 5 (20 marks)**

- a) Explain **FOUR** methods of preserving timber (10 marks)
- b) (i) Name the **FOUR** types of furnaces used in forming metals  
(ii) Name **FOUR** types of non ferrous metals  
(iii) Differentiate stress from strain (10 marks)