



TECHNICAL UNIVERSITY OF MOMBASA  
**Faculty of Engineering &  
Technology**

DEPARTMENT OF BUILDING & CIVIL ENGINEERING  
**CERTIFICATE IN BUILDING & CIVIL ENGINEERING (CBECE 14S)**

EBC 1108: ENGINEERING DRAWING (BUILDING)

**END OF SEMESTER EXAMINATION**

**SERIES: APRIL 2015**

**TIME ALLOWED: 2 HOURS**

**Instructions to Candidates:**

You should have the following for this examination

- *Answer Booklet*

This paper consists of **FIVE** questions. Answer any **THREE** questions of the **FIVE** questions

Maximum marks for each part of a question are as shown  
Use neat, large and well labeled diagrams where required  
This paper consists of **FOUR** printed pages

### Question One

a) Write the following abbreviations in full:

- (i) D.P.M
- (ii) G.L
- (iii) W/C
- (iv) DPC
- (v) D.R.G

**(5 marks)**

b) Draw a section of a strip foundation and show the following details:

- (i) Hardcore
- (ii) Ground earth
- (iii) Foundation concrete
- (iv) Foundation walling
- (v) Damp proof membrane
- (vi) Damp proof course
- (vii) Floor finish

**(10 marks)**

c) Sketch the following tools:

- (i) Trowel
- (ii) Mallet
- (iii) Straight edge
- (iv) Hand saw
- (v) Claw hammer

**(5 marks)**

### Question Two

A vertical cylinder is interpenetrated by a cylinder inclined at an angle of  $30^\circ$  to the horizontal. Draw the curves of intersection  
**(20 marks)**

### Question Three

The figure below shows the front elevation of a regular hexagonal pyramid of side 35mm which has been cut by planes X-X. Draw the following:

- (i) Elevation in the direction of arrow E
- (ii) The auxiliary view of arrow B

**(20 marks)**

#### **Question Four**

The following sketch has been provided by Mr Otieno for production of a working drawing. Draw the floor plan using a scale of 1:50 showing elevations A and B **(20 marks)**

### Question Five

The figure below shows the frustum of a cone. Draw the following views:

- (i) Plan
  - (ii) Auxiliary view of the shape direction 2
  - (iii) Development of the figure
- marks)**

**(20**