



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

DEPARTMENT OF BUILDING & CIVIL ENGINEERING  
**DIPLOMA IN BUILDING & CIVIL ENGINEERING (DBCE)**  
ECV 2204: BUILDING & CIVIL ENGINEERING DRAWING & CAD

**SPECIAL/SUPPLEMENTARY EXAMINATION**  
**SERIES: OCTOBER 2013**  
**TIME ALLOWED: 2 HOURS**

**Instructions to Candidates:**

You should have the following for this examination

- *Answer Booklet*
- *Pocket Calculator*

This paper consists of **FIVE** questions.

Answer any **THREE** questions

Maximum marks for each part of a question are as shown

This paper consists of **TWO** printed pages

### Question One

- a) Describe layers and give it's Keystroke command **(4 marks)**
- b) The following are columns in the layers. Dialogue box what are they used for:
- (i) Linetype
  - (ii) Name
  - (iii) Line weight
  - (iv) On
  - (v) Color
  - (vi) Status** **(16 marks)**

### Question Two

- a) Describe how to draw 2 circles of diameter 50 and 20 **(10 marks)**
- b) describe how to do a polar array using the circles **(10 marks)**

### Question Three

What are the differences between:

- (i) Relative coordinate entry
- (ii) Polar coordinate entry
- (iii) Absolute coordinate entry
- (iv) Absolute coordinate
- (v) Relative coordinate
- (vi) Polar coordinate
- (vii) Absolute paint
- (viii) Relative paint

### Question Four

- a) Give advantages of using CAD in creating Engineering drawings **(6 marks)**
- b) Describe Computer Aided Design and Computer Aided Design and Drafting methods as used in Autocad **(14 marks)**

### Question Five

Using polar co-ordinate entry, relative co-ordinate entry and beginning from an absolute point which has an absolute co-ordinate 400,500 write down the co-ordinate entry of the roof plan in figure1