



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

DEPARTMENT OF BUILDING & CIVIL ENGINEERING
DIPLOMA IN BUILDING & CIVIL ENGINEERING (DBCE 12S)

EBC 2219: BUILDING & CIVIL ENGINEERING & CAD

END OF SEMESTER EXAMINATION
SERIES: DECEMBER 2013
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

Maximum marks for each part of a question are as shown
This paper consists of **THREE** printed pages

Question One

a) Define layers. Briefly describe how to set:

- (i) Line type to ISO dash
- (ii) Line weight to 0.35 mm
- (iii) Line colour to Red

b) Describe the terms as used in AutoCAD:

- (i) World co-ordinate system
- (ii) Cross hairs
- (iii) Origin
- (iv) Extents
- (v) Ortho mode
- (vi) Selection set
- (vii) Clear screen
- (viii) Pick box

(20 marks)

Question Two

Using appropriate coordinate entries write down a follow up of all commands required to enter the points below:

- (i) Command : Circle, Begin at point 7, 6, Next radius R: 75
- (ii) Command: Line (L) and begin at point 50, 30
Draw a line to the right @ 400,0, Next type @0,400 then @-400,0 then @0, -400
- (iii) Command line (L) and begin at point 80,20.
Type @ 200<45, Next @ 200<135 then @ 200<225 then at 200<315 (or close)

(20 marks)

Question Three

Figure 1 shows a section of a truss. Using the three coordinates systems, write down a follow up of all commands required to draw the truss using autocad. Begin at point 10,5

(20 marks)

Question Four

Figure 2 shows figures placed in a desired order. Define the command used and describe how to come up with the desired order using CAD

(20 marks)

Question Five

Define offset command. Briefly describe how to call on the:

- a) Offset command and explain 6 steps of applying the command
- b) Define the mirror command. Briefly describe how to call on the mirror command and explain SIX steps of applying the command.

(20 marks)