



THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

Faculty of Engineering & Technology

DEPARTMENT OF CIVIL AND BUILDING ENGINEERING

DCC 09

FINAL EXAMINATIONS

MAY 2010 SERIES

EB 2307 : COMPUTER AIDED DESIGN

TIME: 2 HOURS

Instructions to Candidates

You should have the following for this examination:

- Answer booklet
- Laptop/Desktop computer

This paper consists of **FIVE** Questions.

Answer questions **ONE** and any other **TWO** Questions.

Maximum marks for each part of a question are as shown.

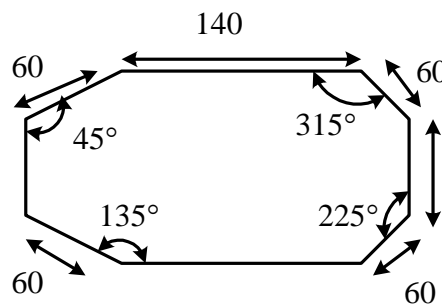
Create a folder in My Documents and name it DCC 09.

Save **ALL** your answers in word and Auto CAD files using your **FULL** names followed by your student number.

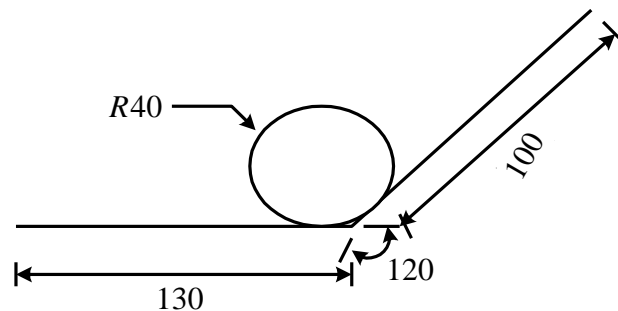
Question ONE (compulsory)

- (a). State **THREE** advantages of using computer Aided Design, in creating drawings over manual drafting. **(3 Marks)**
- (b). List down **FIVE** standard working drawings. **(5 Marks)**
- (c). Briefly explain the use of the following co-ordinate systems as used in CD. **(6 Marks)**
 - (i). Absolute co-ordinates
 - (ii). Relative co-ordinates
 - (iii). Polar co-ordinates

- (d). Using the line tool, construct the outline of the figure below: **(8 Marks)**



- (e). Using the line tool construct the two lines at the length and angle as given below. Then with the Ttr prompt of the circle tool, add the circle as shown. **(8 Marks)**



Question TWO

Draw a detailed plan of a two bedroomed house showing all the details.

(20 Marks)

Question THREE

The figure below shows a simply shaped object in 1sometric using computer aided design software draw in 1st A.P the following orthographic views.

- (a). The front elevation as seen in the direction of the arrow F.
- (b). The plan as seen in the direction of arrow P.
- (c). The end elevation as seen in the direction of arrow E.

(20 Marks)

Question FOUR

The figure below shows a dimensioned elevation of a bracket. Using a CAD software reproduce the elevation showing all the provided dimensions.

(20 Marks)

Question FIVE

Using a CAD software draw a detailed concrete strip foundation on it, show and annotate the following:

- (i). 250mm deep x 600mm wide plain concrete strip foundation.
- (ii). 200mm thick store block wall.
- (iii). 300mm deep hardcore fill.
- (iv). 50mm thick blinding.
- (v). 100mm thick plain concrete ground floor slab.

(20 Marks)