THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of JKUAT)
Faculty of Engineering and Technology

DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

DIPLOMA IN CIVIL ENGINEERING & CAD (DC 09A)

EBC 2217: CIVIL ENGINEERING CAD

END OF SEMESTER EXAMINATION

SERIES: DECEMBER 2011

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 in two sections **A** & **B**
Answer question **ONE (COMPULSORY)** and any other **TWO** questions.
Maximum marks for each part of a question are clearly shown
This paper consists of **SIX** printed pages

SECTION A (COMPULSORY)

Question 1 (30 marks)

a) Explain the **SEVEN** major stages involved in the design process   (14 marks)

b) List down the steps involved when plotting or printing a drawing   (8 marks)

c) The figure below shows a third angle isometric projection of a solid. Draw the 3D solid in the THREE: Right viewport   (8 marks)

Figure 1

SECTION B (Answer any TWO questions from this section)

Question 2 (20 marks)

The figure 2 below shows a site plan for a proposed bungalow. Construct the 3D drawing of the proposed two bed roomed house on the Two: Horizontal viewport on a well landscaped compound. Provide well designed doors and windows. (20 marks)

Figure 2

Question 3 (20 marks)

The figure 3 below is a floor plan of a three bedroomed house. Design the 3D view of the complete house on a well landscaped compound. Provide well designed doors and windows. (20 marks)

Figure 3

Question 4 (20 marks)

The figure 4 below is a three view projection of a model. Working to the details given, construct the 3D model on the Four: Equal viewport and render appropriately.

Figure 4

Question 5 (20 marks)

a) Construct the figure shown below on a Three: Right viewport and revolve it to form a solid of revolution through 180° (10 marks)

Figure 5

b) Working to the polylines shown below, construct the sweep shown below in an appropriate viewport (10 marks)

Figure 6