TECHNICAL UNIVERSITY OF MOMBASA

Faculty of Engineering and Technology

DEPARTMENT OF MECHANICAL AND AUTOMOTIVE ENGINEERING

DIPLOMA IN MECHANICAL ENGINEERING (PLANT OPTION) (DMPL III)
DIPLOMA IN MECHANICAL ENGINEERING (AUTOMOTIVE OPTION) (DAE III)

EME 2133
COMPUTER AIDED DRAWING & DESIGN (CAD)

END OF SEMESTER EXAMINATIONS

YEAR 1 SEMESTER 2

SERIES: DECEMBER, 2013

TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATES:

1. You should have the following for this examination:
   - Answer Booklet
   - Scientific Calculator
   - Computer installed with AUTOCAD

2. This paper consists of **FIVE** Questions.
3. Answer Question **ONE (Compulsory)**,
   ONE question from Section **B** and
   ONE Question from Section **C.**
4. **This paper consists of THREE printed pages.**

Question ONE (Compulsory)

(a) State any **FIVE** disadvantages of computer aided drawing and design as compared to manual drawing and design. **(5 marks)**

(b) Explain the **FOUR** features of AUTOCAD software. **(8 marks)**

(c) State the **THREE** methods of activating and using AUTOCAD commands. **(3 marks)**

(d) Define the following AUTOCAD terminologies:

(i) Tool palette
(ii) Block
(iii) Plot
(iv) Hatch

(4 marks)

SECTION B – (Answer only **ONE** Question)

Question TWO

Reproduce in AUTOCAD the 2-D view of a machine part shown in Figure Q2. **(20 marks)**

Question THREE

Reproduce in AUTOCAD the 2-D view of the part shown in Figure Q3. **(20 marks)**

SECTION C – (Answer only **ONE** Question)

Question FOUR

Reproduce in AUTOCAD the machine bracket shown in Figure Q4 using 3-D modeling. **(20 marks)**

Question FIVE

Reproduce in AUTOCAD the machine bracket shown in Figure Q5 using 3D modeling. **(20 marks)**