## TECHNICAL UNIVERSITY OF MOMBASA

# Faculty of Engineering and Technology <br> Department of Electrical \& Electronics Engineering <br> UNIVERSITY EXAMINATION FOR: <br> BSc. Electrical Engineering <br> EMC 4522 : Computer Aided Design <br> SPECIAL/SUPPLEMENTARY EXAMINATION <br> SERIES: SEPTEMBER 2018 <br> TIME: 3 HOURS <br> DATE: Pick Date Sep 2018 

## Instruction to Candidates:

You should have the following for this examination

- Answer booklet
- Non-Programmable scientific calculator

This paper consists of FIVE questions. Attempt question ONE and any other TWO questions.
Maximum marks for each part of a question are as shown.
Do not write on the question paper.

## SECTION A (2D-Drafting and Annotation), COMPULSORY Question ONE

a) Create a title block of 420 by 297 mm . The details of the lower right corner should be as of Fig. 1(a), but customized to match individual student details. (10 marks)


Fig. 1(a)

Title Block Text specifications: Font Name; Times New Roman, Font Style; Regular, Text Height; 4.0,
Text Colour; Any (but should be visible).
b) Reproduce Fig. 1(b) in AutoCAD and Dimension Appropriately. Main figure and dimensions should be of different colours of one's own choice but visible.


Fig. 1(b)
c) Appropriately insert the Title Block of Fig. 1(a) into Fig. 1(b) or vice versa and present as one final drawing.

## SECTION B (Isometric Drawing), ATTEMPT Q2 OR Q3

## Question TWO

Construct an isometric drawing of Fig. 2 and dimension appropriately.
(20 marks)


Fig. 2

## Question THREE

Construct an isometric drawing of Fig. 3 and dimension appropriately.


Fig. 3

## SECTION C (3D-Modeling), ATTEMPT Q4 OR Q5

## Question FOUR

Fig. 4(a) and Fig. 4(b) represent the top and side views of an object respectively. Construct a 3D-model in S/E isometric view and present the model in Conceptual visual style. Do not dimension.


Fig. 4(a)


Fig. 4(b)

## Question FIVE

Fig. 5(a) and Fig. 5(b) represent the top and right views of an object respectively. Construct a 3D-model in S/E isometric view and present the model in Conceptual visual style. Do not dimension.


Fig. 5(a)


Fig. 5(b)

