# TECHNICAL UNIVERSITY OF MOMBASA 

# Faculty of Engineering and Technology <br> Department of Electrical \& Electronics engineering UNIVERSITY EXAMINATION FOR: <br> Certificate in Electrical \& Electronics Engineering <br> EME 1101 : Engineering Drawing I <br> SPECIAL/ SUPPLEMENTARY EXAMINATION <br> SERIES: AUGUST 2019 <br> TIME: 2 HOURS <br> DATE: Pick Date Aug 2019 

## Instruction to Candidates:

You should have the following for this examination

- Student I.D. Card \& Examination Pass
- 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.

## Question ONE

Figure 1 shows a Mild Steel Bracket. Draw full size in 3rd angle projection: ( $\mathbf{3 0}$ marks)
a) Front Elevation in the direction of arrow A
b) End Elevation
c) Plan

## Question TWO

a) Draw a perpendicular line at the end of a straight line AB 80 mm long. ( $\mathbf{2}$ marks)
b) Inscribe a circle within a triangle of sides $60 \mathrm{~mm}, 70 \mathrm{~mm}$, and 50 mm .
c) Circumscribe a circle to a given triangle of sides $60 \mathrm{~mm}, 80 \mathrm{~mm}$, and 70 mm .
d) Use drawing Instruments to Construct a Heptagon and a Nonagon using two kinds of methods.

## Question THREE

Figure 2 shows two views of a block in $3^{\text {rd }}$ angle projection. Draw full size the Isometric View of the block.

## Question FOUR

a) Draw line $A B 100 \mathrm{~mm}$ and divide it into seven equal parts.
(10 marks)
b) Figure 3 shows the Front view and Plan of a squire pyramid. Draw:
i. End view in the direction of arrow F
ii. The sectioned plan

## Question FIVE

Draw free hand, pictorial Isometric sketches of any two of the following Items:
a) Three Pin Top Plug
b) Side Cutter
c) Long nose pliers

## FIGURES



Figure 1


Figure 2


Figure 3

