# TECHNICAL UNIVERSITY OF MOMBASA 

Faculty of Engineering and Technology<br>DEPARTMENT OF ELECTRICAL \& ELECTRONIC ENGINEERING CERTIFICATE IN TECHNOLOGY ELECTRICAL AND ELECTRONICS ENGINEERING (CEEE2)<br>EME 1151<br>ENGINEERING DRAWING II<br>END OF SEMESTER EXAMINATIONS<br>SERIES: DECEMBER 2015<br>TIME: 2 HOURS

## INSTRUCTIONS TO CANDIDATES

1) You should have the following for this examination;

- Answer booklet
- Non-programmable calculator

2) Answer any THREE Questions

## QUESTION ONE

a) Draw a tangent and normal line to a Cycloid given diameter of a Circle to be 60 mm

10 Marks
b) From a Circle of Diameter 30mm draw an Archimedean Spiral

## QUESTION TWO

From the V-Block shown Figure 1, draw the following in $1^{\text {st }}$ angle Projection
a) A Front Elevation in the direction of arrow $C$
b) An End Elevation in direction A.
c) A Plan. 20 Marks

QUESTION THREE
Figure 2 shows Three views of a Block in an angle of Projection
a) State which angle of Projection used.
b) Draw fullsize the Isometric view of the Block with $X$ as the lowest point. 20 Marks

## QUESTION FOUR

Draw Ellipses using the following methods

1) Trammel Method
2) Rectangular Method

20 Marks
QUESTION FIVE
a) Draw free hand sketch of a Combination Pliers 10 Marks
b) Construct an External tangent to two Circles of unequal radii. $R=50 \mathrm{~mm}$, and $r=35 \mathrm{~mm}$ with centre distance of 100 mm

10 Marks

