TECHNICAL UNIVERISTY OF MOMBASA

Faculty of Engineering & Technology

DEPARTMENT OF ELECTRICAL & ELECTRONIC ENGINEERING

CERTIFICATE IN ELECTRICAL & ELECTRONIC ENGINEERING
(CEEE II/CEPE II)

EME 1151: ENGINEERING DRAWING II

END OF SEMESTER EXAMINATION
SERIES: DECEMBER 2014
TIME: 2 HOURS

<u>**Instructions to Candidates:**</u>
You should have the following for this examination
- *Answer Booklet*

This paper consists of **FIVE** questions. Answer any **THREE** questions
Maximum marks for each part of a question are as shown
This paper consists of **TWO** printed pages

Question One

a) Construct an octagon given the distance across the flats as 30mm   **(3 marks)**

b) Construct an hexagon inside a circle of diameter 60mm.   **(3 marks)**

c) Construct a regular pentagon given the length of one side as 50mm   **(6 marks)**

d) Construct an internal tangent to two circles of unequal radii, R = 20mm and r = 15mm at centre distance of 60mm.   **(8 marks)**

Question Two

From the block shown in figure 1, draw the following in its angle projection.

a) A front Election in section on cutting plane G-G
b) An End Elevation
c) A plan   **(20 marks)**

Question Three

Figure 2 shows THREE views of a block in 3rd angle projection. Using the dimensions given, draw full size the isometric view of the block.   **(20 marks)**

Question Four

Draw BS 3939 symbols for any four of the following:

 a) Indicator lamp
 b) Loudspeaker
 c) Bell
 d) Buzzer disheartening
 e) Horn speaker   **(20 marks)**

Question Five

a) Draw a two-stage common emitter NPN Transistor Amplifier circuit   **(10 marks)**

b) Draw a D.C. power supply output stage incorporating the following:
        (i) A transformer VAC
        (ii) A filter network
        (iii)   Voltage regular circuit
        (iv) Load