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**University Examinations 2014/2015**

FIRST YEAR, SECOND SEMESTER EXAMINATION FOR DIPLOMA IN ELECTRICAL ENGINEERING

**EMC 2151: ENGINEERING DRAWING II**

**DATE: AUGUST, 2015 TIME: 3 HOURS**

**INSTRUCTIONS:** *Answer question* ***one*** *and any other* ***two*** *questions*

**QUESTION ONE – 30 MARKS**

Fig. 1 shows a sketch and views of a lever bracket. The pin fits into the hole in the bracket and is held in position by means of an M15 hexagonal nut. Draw full size the following views of the assembled bracket, including the nut.

1. A FE looking in the direction of arrow X (8 Marks)
2. A sectional E-E on A-A looking in the direction of the arrows. (11 Marks)
3. A sectional plan on B-B working in the direction of the arrows. (11 Marks)

**QUESTION TWO (15 MARKS)**

1. Draw neat sketches of the following electrical and electronic components and devices.
2. Transformer
3. Generator
4. Junction of connected paths, conductors or wires
5. Incandescent lamp
6. Any two types of resistors
7. Fuse
8. Push button circuit closing
9. PNP type transistor
10. Motor

**QUESTION THREE (15 MARKS)**

A pentagonal pyramid truncated along the cutting plane line A-A is shown in fig.2. Draw;

1. Front and plan views in third angle projection. (7 Marks)
2. True length of slant edges. (4 Marks)
3. An auxiliary view to show the tree shape of section A-A. (4 Marks)

**QUESTION FOUR (15 MARKS)**

Fig. 3 shows a square pipe intersecting a circular pipe. Using appropriate drawings establish the following;

1. Curve of intersection (7 Marks)
2. The surface development of the square pipe. (8 Marks)