

THE COPPERBELT UNIVERSITY
SCHOOL OF MINES & MINERAL SCIENCES
15th MAY 2024 / ENGINEERING DRAWING [ED 111 / ED 211] / TEST 1

Instructions

1. Mark all line, except construction lines, black, bold and dense, observe the distinction between thick and thin lines and keep line thickness consistent throughout. **Title Block = 10 Marks**
 2. Unless stated, all drawings should be drawn full Size(1:1)
 3. **Marks will be awarded for good draughtsmanship and neatness.**
 4. Duration: Mins
 5. Answer all questions. Total = **100 Marks**
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QUESTION 1 [40 Marks]

- (a) Inscribe a circle in a **triangle** whose parameters are: AB = 116 mm, angle BAC = 67.5° , Height = 87 mm . [10]
- (b) Construct a regular **Hexagon** whose sides are **50** each and *transform* the hexagon to a triangle of equal area. [10]
- (c) Construct a **Helix** with the following parameters: Circle Radius 30, Pitch 48, Width 12, 2 Revolutions. [20]

QUESTION 2 [50 Marks]

Construct the **geometrical shape** shown in the figure below.

