



MACHAKOS UNIVERSITY

University Examinations for 2019/2020 Academic Year

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

FIRST YEAR THIRD SEMESTER EXAMINATION FOR

CERTIFICATE IN BUILDING TECHNOLOGY

APPLIED DRAWING

DATE:

TIME:

INSTRUCTIONS TO CANDIDATES

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1. The major and minor axis of an ellipse are 128 and 72mm respectively. Construct the ellipse using the concentric circles method. (20 Marks)
2. Fig. 2 shows an irregular pentagon. Copy the figure full size and convert it into a square of equivalent area. Calculate the area of the square to the nearest mm squared. (20 Marks)

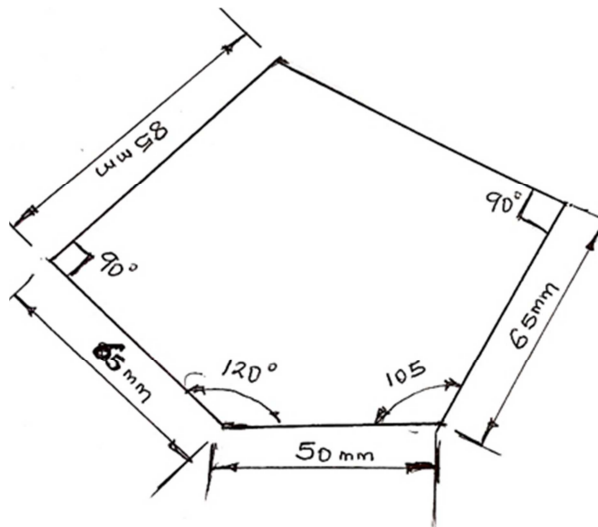


Fig. 2

3. Fig. 3 Shows a regular hexagon of sides 70mm. Draw the figure full size and construct an reduced similar hexagon making side AB 55mm. (20 Marks)

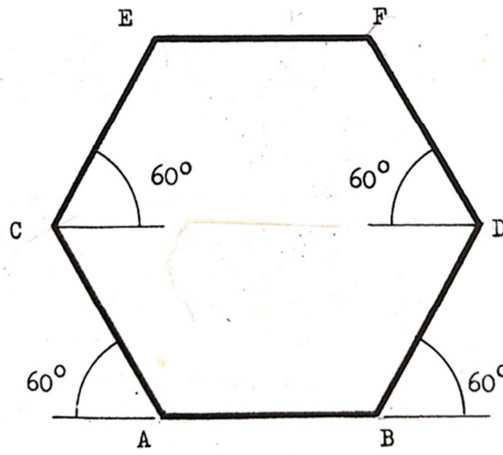


Fig. 3

4. Fig. 4 shows a pictorial view of a building block. Draw the following views in third angle projection. (20 Marks)
- Front elevation in the direction of arrow X
 - Right end elevation.
 - Plan

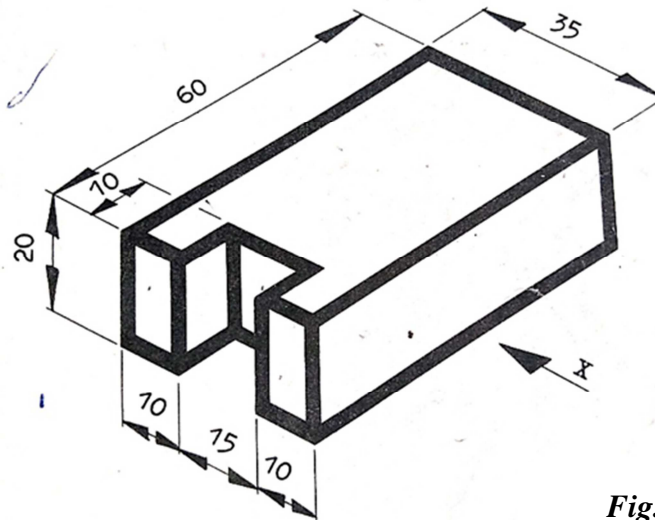


Fig. 4

5. Fig 5 shows three views of a stone block in first angle projection. Assemble the views and draw an isometric view of the block making C the lowest point. (20 Marks)