



TECHNICAL UNIVERSITY OF MOMBASA

Faculty of Engineering and Technology
Department of BUILDING & Civil engineering
UNIVERSITY EXAMINATION FOR:
BACHELOR OF SCIENCE IN ENVIRONMENTAL HEALTH

EBC 4250 : TECHNICAL DRAWING AND DESIGN

END OF SEMESTER EXAMINATION

SERIES: APRIL 2025

TIME: 3 HOURS

Instructions to Candidates

You should have the following for this examination

-Drawing paper, examination pass and student ID

-Drawing set, set squares and T-square

This paper consists of **five** questions.

Attempt question ONE (Compulsory) and any other TWO questions

Do not write on the question paper.

QUESTION ONE (COMPULSORY) 30 Marks

Draw the **floor plan** of the one bedroomed house in Figure 1 below using a scale of 1:50. Dimension the house appropriately and hatch the walls as required. Label all the rooms.

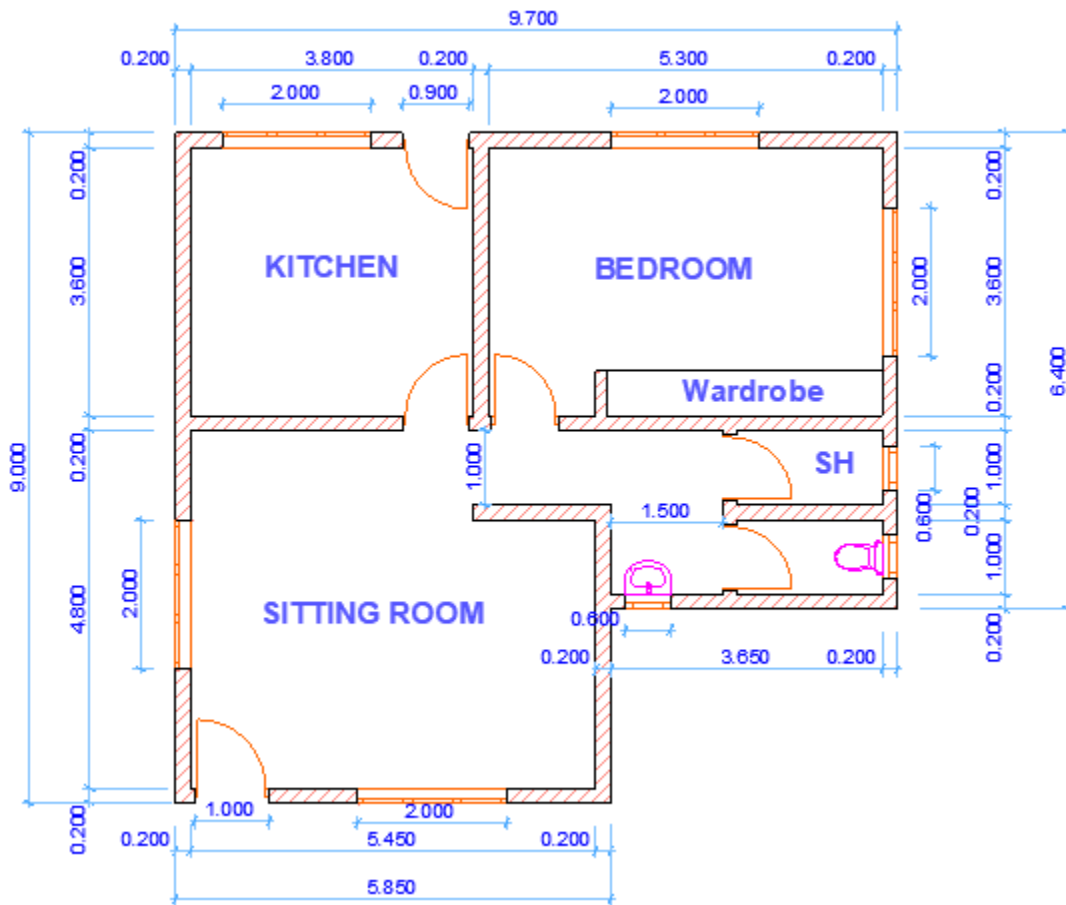


Figure 1

ANSWER ANY TWO QUESTIONS FROM THIS SECTION
QUESTION TWO (20 Marks)

Draw the **Oblique Projection** of the casting shown in Figure 2. Dimension the drawings as required. The arrow points in the direction of the front face.

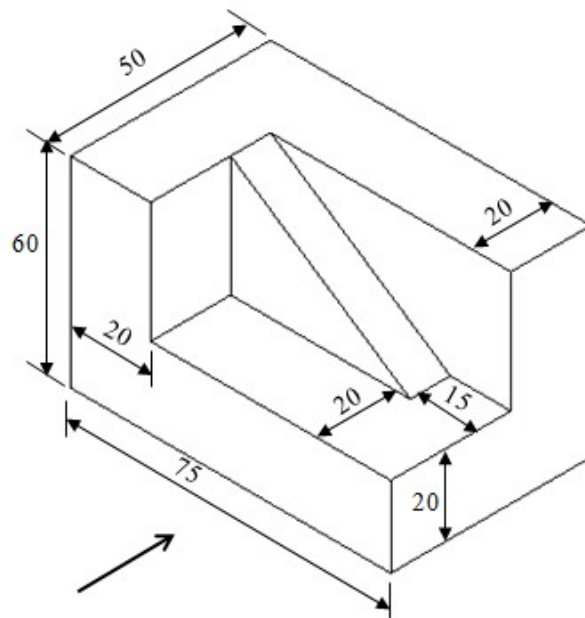


Figure 1

QUESTION THREE (20 Marks)

Draw the **1st Angle orthographic projection** of the casting shown in Figure 3. Dimension and label the drawings as required. The arrow points in the direction of the Front Elevation. Use a scale of 1:2.

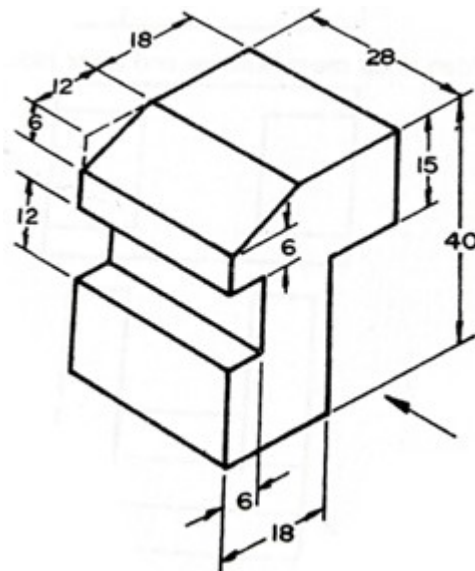


Figure 2

QUESTION FOUR (20 Marks)

Draw the **Front and Right elevations** of the one bedroomed house in Figure 1. Dimension and label the drawing as required.

QUESTION FIVE (20 Marks)

Construct the following plane figures:

- a) Regular hexagon inscribed in a circle diameter 90mm (5 Marks)
- b) Regular pentagon with sides 45mm long (5 Marks)
- c) Regular heptagon of sides 32mm long (5 Marks)
- d) Regular octagon 80mm across corners (5 Marks)