MURANG'A UNIVERSITY OF TECHNOLOGY

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF ENGINEERING TECHNOLOGY

UNIVERSITY SPECIAL EXAMINATION

2020/2021 ACADEMIC YEAR

SECOND YEAR **FIRST** SEMESTER EXAMINATION FOR DIPLOMA IN CIVIL ENGINEERING

SEB 1224 – ENGINEERING DRAWING III

DURATION: 2 HOURS

Instructions to candidates:

1. Answer question One and Any Other Two questions.

2. Mobile phones are not allowed in the examination room.

3. You are not allowed to write on this examination question paper.

SECTION A: ANSWER ALL QUESTIONS IN THIS SECTION

QUESTION ONE (30 MARKS)

The Figure I (attached) shows a block in first angle orthographic projection. Draw:
  a) An isometric drawing of the block.   (10 marks)
  b) An oblique drawing of the block.   (10 marks)
  c) Draw free hand sketching of the block. Make a one-point perfective drawing of the
      block.   (10 marks)

Figure I
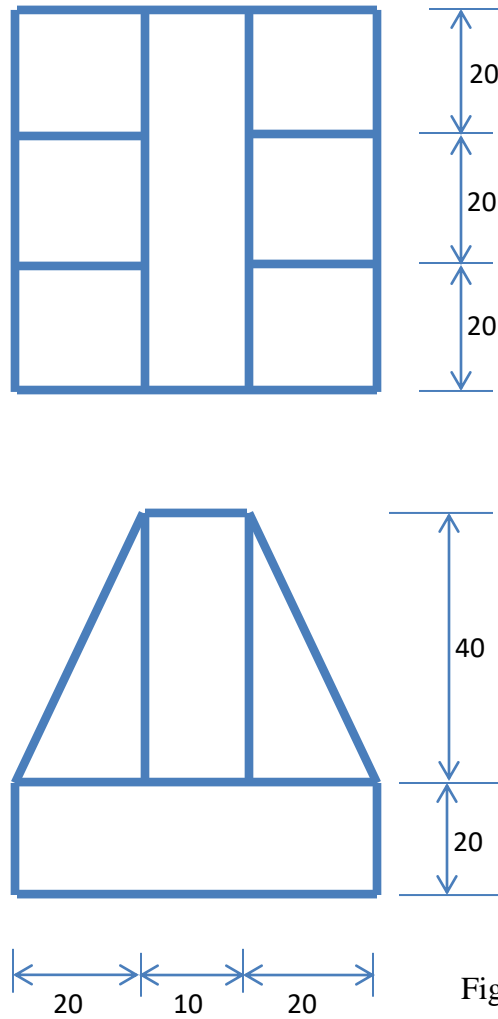
SECTION B – ANSWER ANY TWO QUESTIONS IN THIS SECTION

QUESTION TWO (20 MARKS)

From the information given;

       Floor to floor height – 2650

       Waist of the stair – 180

       Stair well size – 3600 × 2600 (internal dimensions)

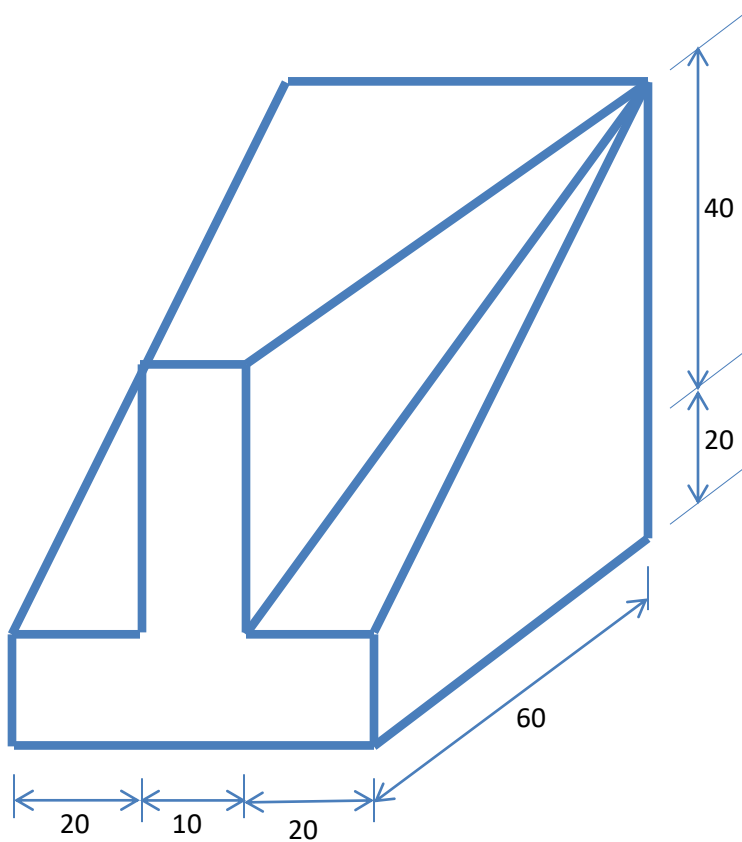Design and draw the dog legged stair on a scale of 1:100   (20 marks)

QUESTION THREE (20 MARKS)

Figure 2 shows an oblique view of a block. Draw;

     i.   Front elevation

     ii.   End elevation

     iii.   Plain view   (20 marks)

     iv.

QUESTION FOUR (20 MARKS)

Figure 3 shows the floor plan of a simple servant quarter. To a scale of 1:50, draw the plan and the section A-A using the following information.

       Height from floor to wall plate 2700 mm
       Foundation strip 200×600 mm
       Roof pitch 30^0
       Foundation wall 230 mm thick
       Concrete floor slab 150 mm thick
       Eave distance from the wall 600 mm
       Wall above DPC 150 mm thick
       Hardcore filling 200 mm thick
       Kingpost truss to be used
       Roof covering will be corrugated iron sheet
       Wall plate 100×50 mm
       Assume any other information not given.   (20 marks)