



KIBABII UNIVERSITY

UNIVERSITY EXAMINATIONS
2020/2021 ACADEMIC YEAR

FOURTH YEAR FIRST SEMESTER
MAIN EXAMINATIONS

FOR THE DEGREE OF BSC (PHYSICS)

COURSE CODE: SPH 412

COURSE TITLE: TECHNICAL DRAWING

DURATION: 2 HOURS

DATE: 21/07/2021

TIME: 9:00-11:00AM

INSTRUCTIONS TO CANDIDATES

- Answer **QUESTION ONE** (Compulsory) and any other two (2) Questions.
- Indicate **answered questions** on the drawing paper.
- Answer each question on a separate drawing paper.

This paper consists of 3 printed pages. Please Turn Over



KIBU observes ZERO tolerance to examination cheating

QUESTION 1 (30 marks)

Fig. 1 is a wooden block. Draw the block in first angle orthographic projection including the following:

- a. Border lines (2 marks)
- b. Title block (8 marks)
- c. Front elevation, plan and end elevation (12 marks)
- d. At least six dimensions (6 marks)
- e. First angle projection symbol (2 marks)

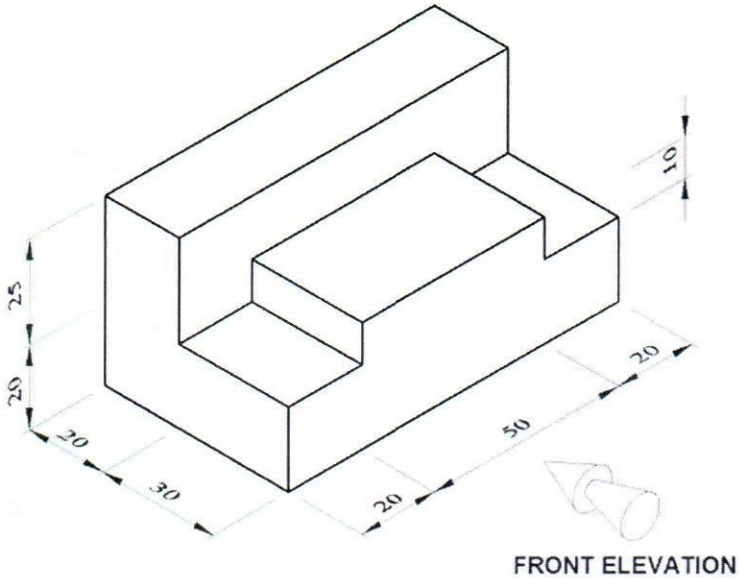


Fig. 1

QUESTION 2 (20 marks)

Produce an isometric projection drawing from Fig. 2 drawn in First Angle Projection. Include any six (6) dimensions.

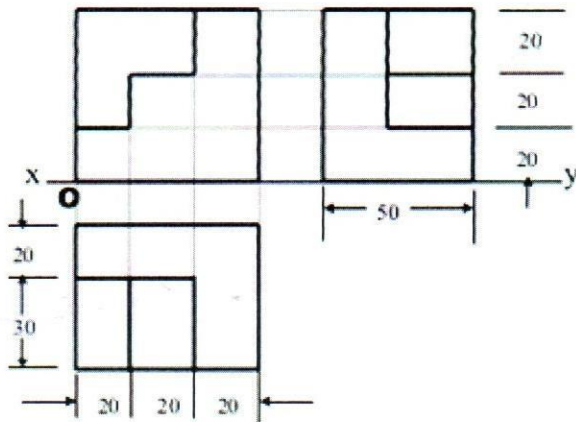


Fig. 2

QUESTION 3 (20 marks)

Using rectangular method, construct an ellipse whose major axis is 80 mm and minor axis is 60 mm.

QUESTION 4 (20 marks)

Draw the three orthographic views of Fig. 3 in Third Angle projection and include at least six (6) dimensions.

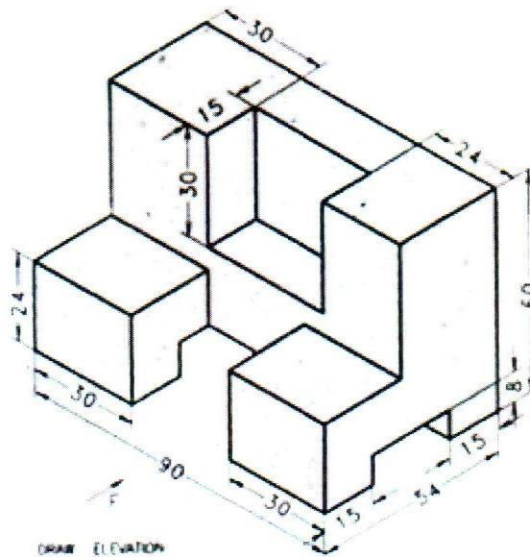


Fig. 3

QUESTION 5 (20 marks)

- a. Show conventional representation for steel, glass and concrete. (6 marks)
- b. Show any three (3) types of lines and state where they are used. (6 marks)
- c. Using free hand sketching, draw the Cabinet oblique view of the block shown in Fig. 4. (8 marks)

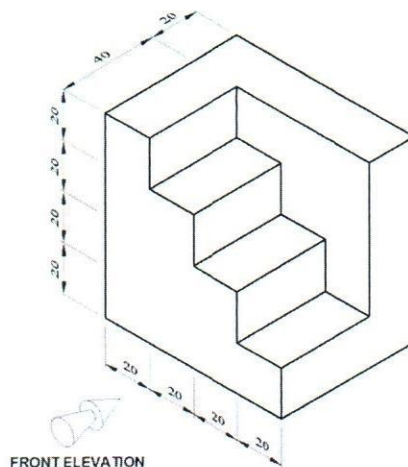


Fig. 4