



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF ENGINEERING AND TECHNOLOGY

**UNIVERSITY EXAMINATIONS FOR THE DEGREE IN SCIENCE IN
CONSTRUCTION MANAGEMENT**

1ST YEAR 1ST SEMESTER 2024 - 2025 ACADEMIC YEAR

CENTRE: MAIN CAMPUS

COURSE CODE: TCB 1101

COURSE TITLE: ENGINEERING DRAWING I

EXAM VENUE: STREAM: BSc CON MGT

DATE: 13/1/2025 EXAM SESSION: 9-11.00 AM

DURATION: 3 HOURS

Instructions

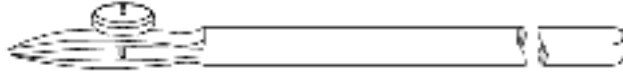
- 1. Answer section A (Compulsory) and ANY other two questions from section B**
- 2. Candidates are advised not to write on question paper**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room**

SECTION A: 20 Marks

QUESTION ONE (10 Marks)

a) Listed here below are some drawing equipment which aid in drafting work. Name each equipment and state its purpose in drafting. **(5 Marks)**

i. Equipment A



ii. Equipment B



iii. Equipment C



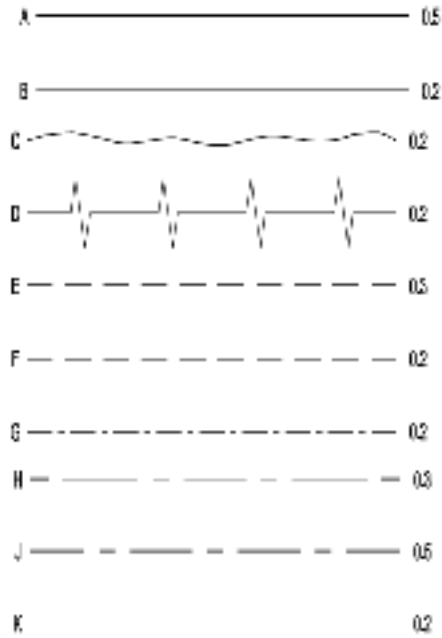
iv. Equipment D



v. Equipment D



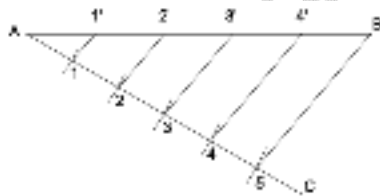
b) You are given some common drafting lines below. Name the line specified and state its function. **(5 Marks)**



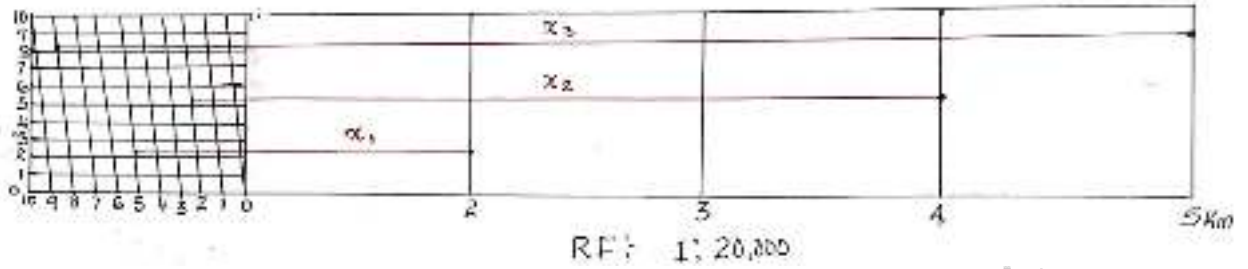
- i. Line A:
- ii. Line C:
- iii. Line E:
- iv. Line G:
- v. Line H:

QUESTION TWO (10 Marks)

- a) Explain the procedure shown below (2 Marks)



- b) Classify engineering drawing based on method of presentation (2 Marks)
- c) Drawing is said to be a language of communication. List any five types of languages you know of which drawing may fall in any one of them. (2.5 Marks)
- d) Why do you need to learn drawing which is an engineering language yet you are a construction manager / energy technologist? (1.5 Marks)
- e) Name the figure shown below and state the value of x_3



SECTION B: 30 Marks

Answer any two questions

QUESTION THREE (15 Marks)

- Construct a chord scale and use it to draw an angle of 65° . (7 Marks)
- On a building plan, a line of 20 cm long represents a distance of 10 m. Devise a diagonal scale for the plan to read up to 12m, showing meter, decimeter and centimeter. Represent on the scale, the lengths, 6.48 mm and 11.14 mm. (8 Marks)

QUESTION FOUR (15 Marks)

Develop the orthographic views of fig Q4. Take the 60m dimension side as the front

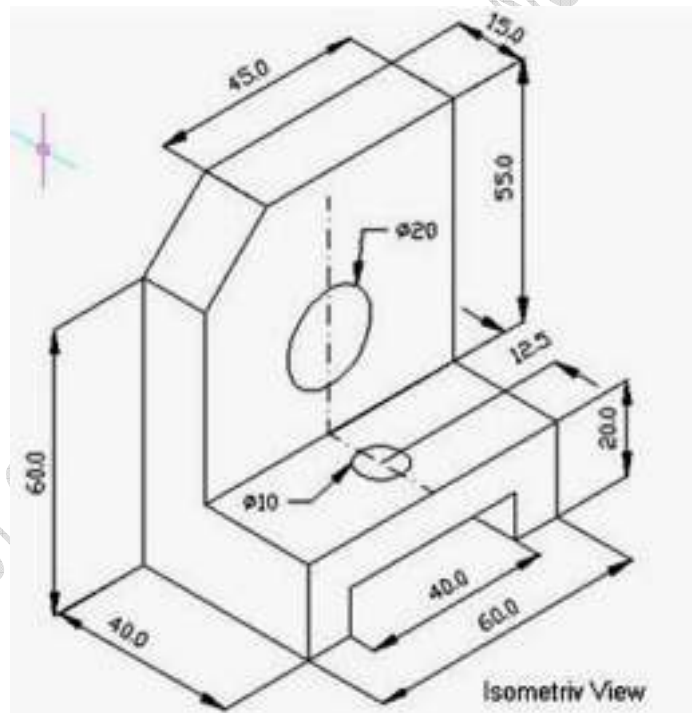


Fig Q4

QUESTION FIVE (15 Marks)

Construct isometric view from the orthographic views given in fig Q5

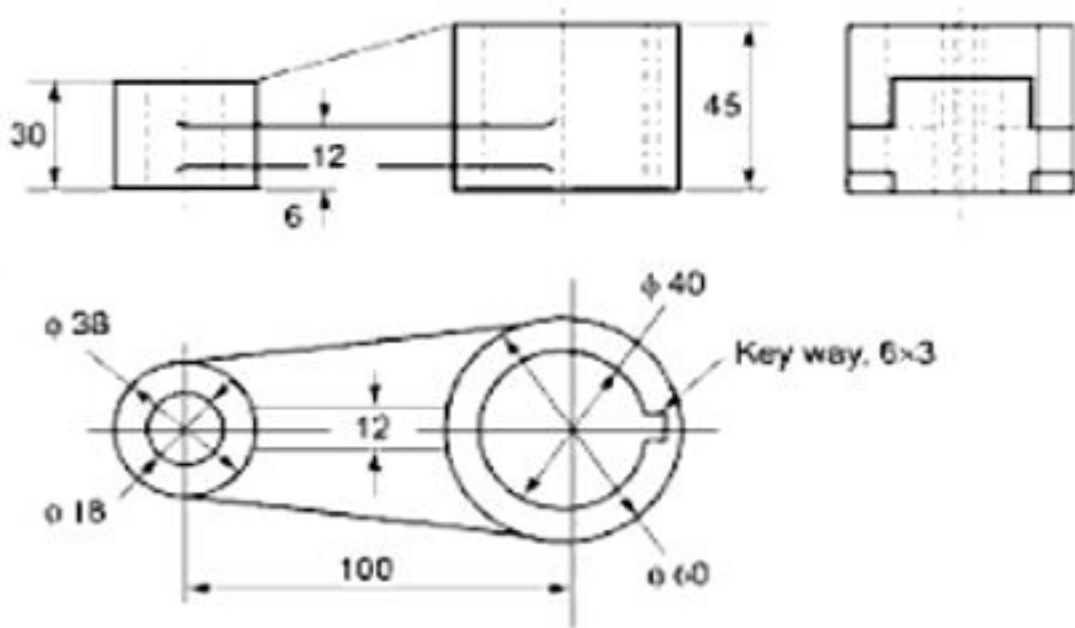


Fig Q5

QUESTION SIX (15 Marks)

- a) Draw the orthographic views of fig Q6(a) (7 Marks)

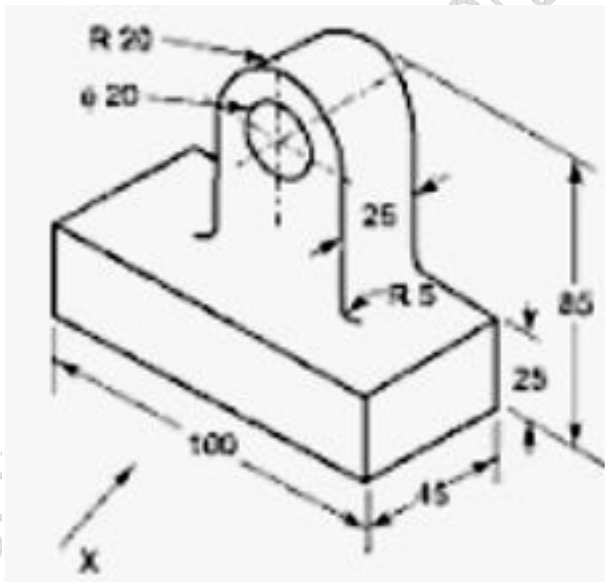


Fig Q6(a)

- b) Construct isometric view from the ortho views given in fig Q6(b) (8 Marks)

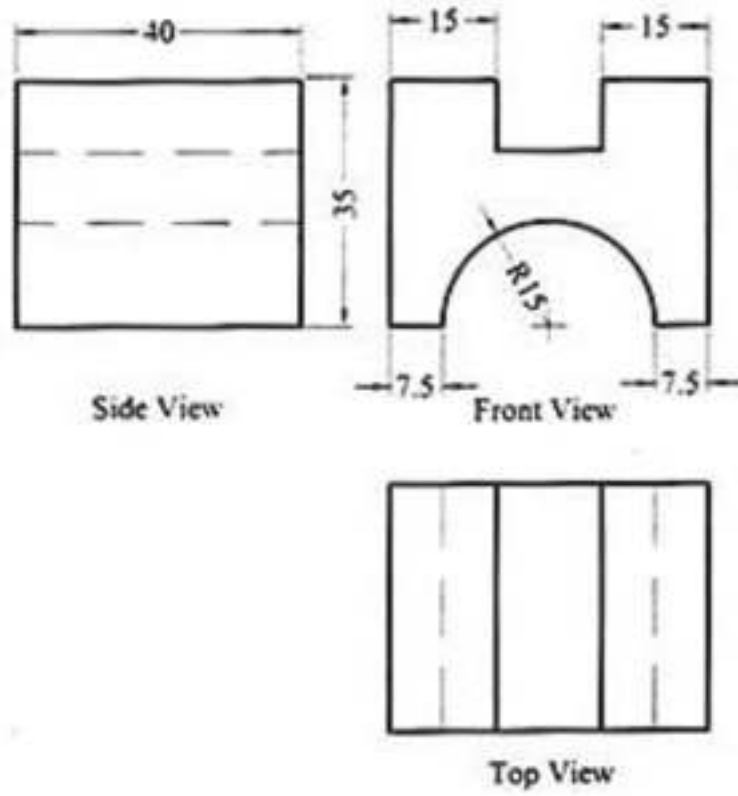


Fig Q6(b)

JUST OBSERVES ZERO TOLERANCE

HEATING