



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF ENGINEERING AND TECHNOLOGY

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

1ST YEAR 1ST SEMESTER 2022/2023 ACADEMIC YEAR

CENTRE: MAIN CAMPUS

COURSE CODE: TCB 1101

COURSE TITLE: ENGINEERING DRAWING I

EXAM VENUE: STREAM: BSc. CONSTRUCTION MGT

DURATION: 3 HOURS

Instructions

- 1. Answer question 1 (Compulsory) and ANY other two questions**
- 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.**



Registration No.....

SECTION A: 10 Marks

QUESTION ONE (10 marks)

Listed here below are some drawing equipment which aids in drafting work. Name each equipment and state its purpose in drafting.

- a) Equipment A (2 marks)



- b) Equipment B (2 marks)



- c) Equipment C (2 marks)



- d) Equipment D



- e) Equipment C



Registration No.....



QUESTION TWO (10 marks)

- a) Outline key differences between *artistic drawing* and *Technical drawing* **5marks**
- b) Answer the following
 - i. What do you understand by the word projection in engineering drawing?
1 mark
 - ii. With the aid of a sketch, explain how image is formed on the *projection plane*
5 marks
 - iii. With the aid of sketches, differentiate amongst isometric drawing, oblique drawing and perspective drawing **4 marks**

SECTION B: 30 Marks

QUESTION THREE (15 marks)

Given the orthographic multi-views of an object below, develop the pictorial view using the isometric method



Registration No.....

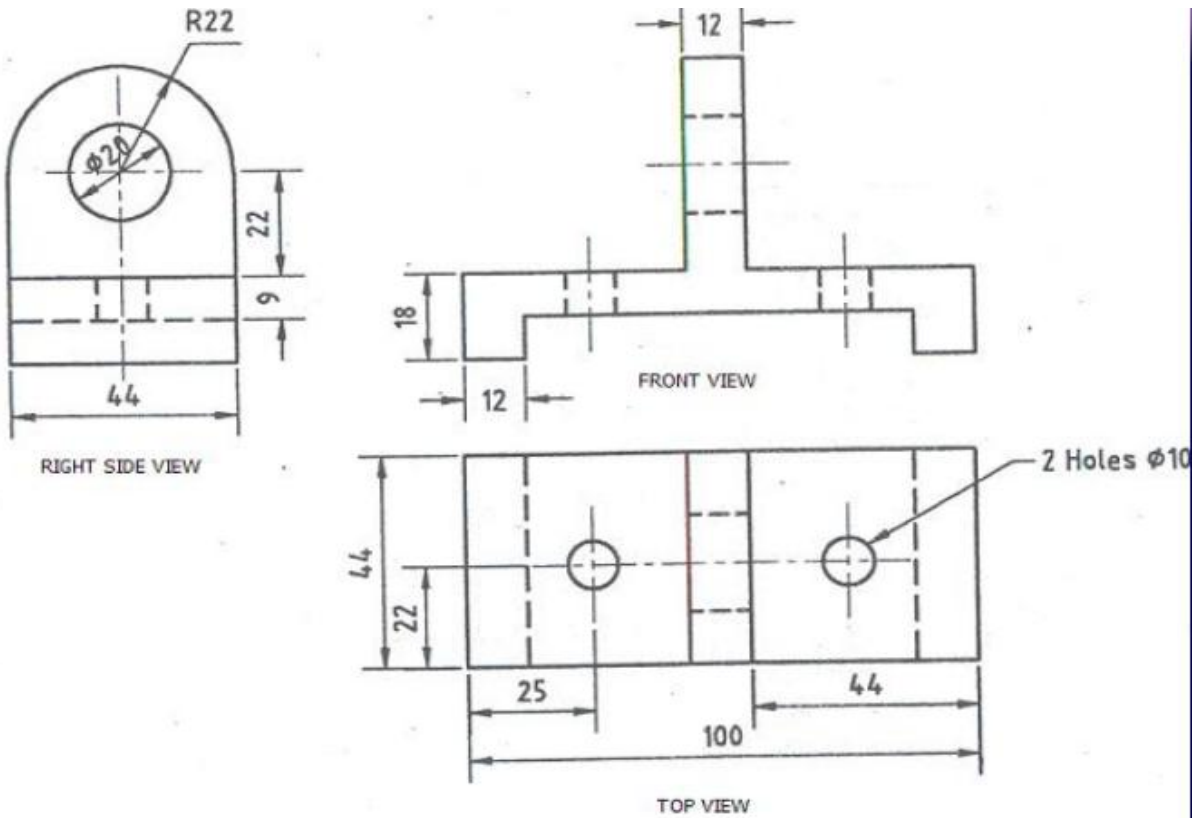


Fig Q3: Orthographic View

QUESTION FOUR (15 marks)

Figure Q4 shows a pictorial view of an object. Develop three orthographic views of the same. Take the front as the side shown by arrow.



Registration No.....

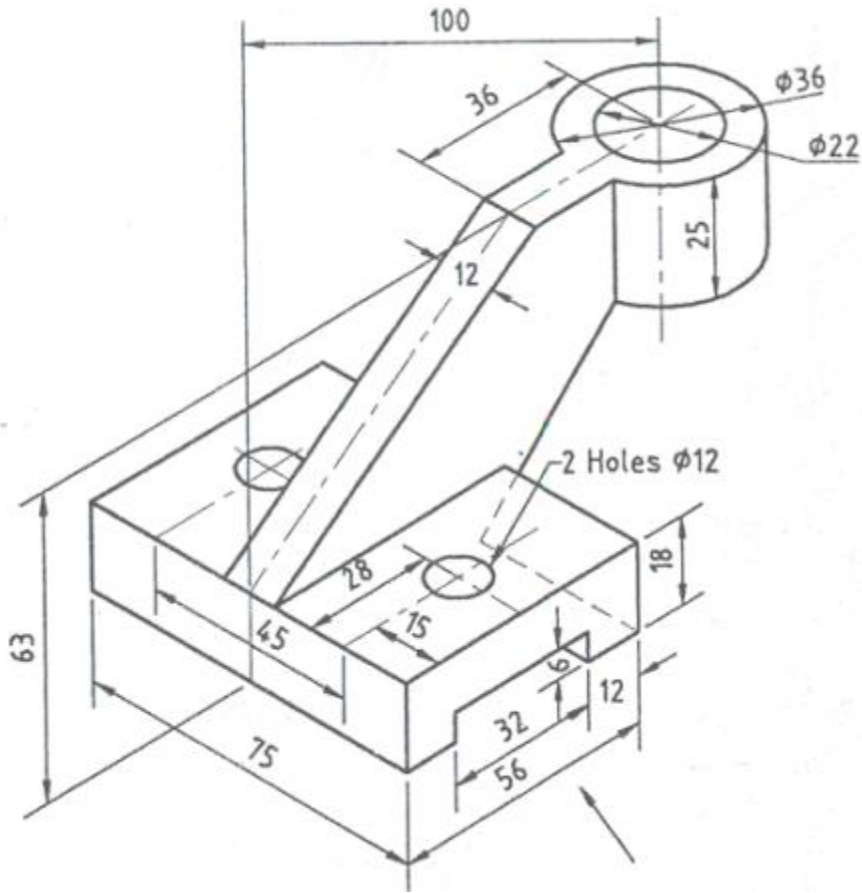


Fig Q4: Pictorial View

QUESTION FIVE (15 Marks)

- a) Construct an ellipse using the four centre method given a rhombus of 100 mm & 70 mm long diagonals **7.5 marks**
- b) A stone is thrown from a building of 7 m high and at its highest flight it just crosses a palm tree 14 m high. Trace the path of the stone, if the distance between the building and the tree measured along the ground is 3.5 m. **7.5 marks**