

CHUKA



UNIVERSITY

**UNIVERSITY EXAMINATIONS**

**EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE**

**AGEN 111: INTRODUCTION TO ENGINEERING DRAWING**

**STREAMS: BSC AGRI Y3S1**

**TIME: 2 HOURS**

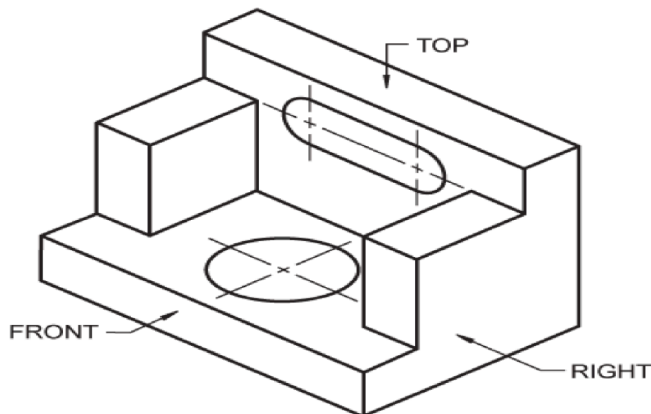
**DAY/DATE: MONDAY 16/12/2024**

**8.30 A.M – 10.30 A.M**

**INSTRUCTIONS:**

**SECTION 1**

- 1) Explain the importance of a border line as used in drawing (3marks)
- 2) Using a sketch explain the components of a title block (4marks)
- 4) The figure shown below shows the pictorial view of an engineering component. Sketch in free hand and in good proportions, suitable front view, end view and plan views of each component using third angle orthographic projection. 10marks



- 4) Using the necessary sketches, show how you can,
  - i) Dimension radius curves
  - ii) Dimension angles (4marks)
- 5) Divide a line measuring 150mm into 9 equal parts. Explain every step of the process. (4marks)
- 6) Construct and explain a radius curve of 30mm at an acute angle of 70°. (5marks)

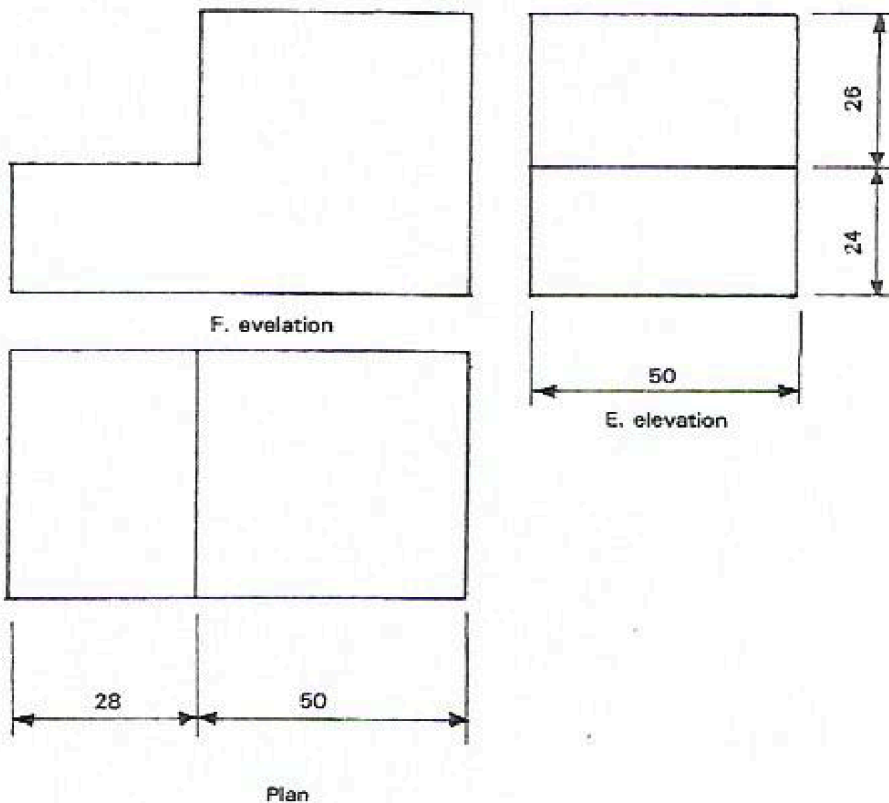
**SECTION 11**

**Question 7**

- a) Draw a cabinet projection of a clock case using oblique projection. The block Measures 75mm long by 65mm high by 35mm deep. The hole has a diameter of 50mm and the thickness around the hole is 5mm (10marks)
- b) Isometrically draw a block measuring 70mm long by 50mm high by 30mm deep. From one of its end draw a table tenon measuring 25mm by 5mm by 25mm. (10marks)

**Question 8**

- a) Explain the use of TEN different drawing equipments (10marks)
- b) The figure shown below shows first angle projection views of shaped block. Using A4 paper size draw the pictorial view of the block. (10marks)



**Question 9**

- a) 1) Draw and explain THREE lines used in geometrical constructions (4marks)

- b) 7) Explain Isometric drawing, pointing out the two important rules that should be noted when initializing an isometric drawing (6marks)
  - c) Discuss the different type of pencils with their use (5marks)
  - d) Discuss sizes of drawing paper show sizes A1,A2,A3,A4,and A5 and state their dimensions (5marks)
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