



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF ENGINEERING AND TECHNOLOGY
UNIVERSITY EXAMINATIONS FOR THE DEGREE IN SCIENCE IN
RENEWABLE ENERGY TECHNOLOGY AND MANAGEMENT
1ST YEAR 1ST SEMESTER 2017/2018 ACADEMIC YEAR
CENTRE: MAIN CAMPUS**

COURSE CODE: TET 3112

COURSE TITLE: ENGINEERING DRAWING I

EXAM VENUE: LR 1

STREAM: BSc REN ENERGY TECH & MGT

DATE: 13/12/2017

EXAM SESSION: 9.00 – 11.00AM

DURATION: 2 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**

QUESTION ONE (20 MARKS)

- i. Explain the importance of taking good care of drawing instruments while in use and storage (4 marks)
- ii. Drawing can be broadly categorized as technical and artistic. Outline the major differences between the two (3 marks)
- iii. How do you expect to apply drawing in your professional field? (2 Marks)
- iv. Differentiate between measuring scale and representation scale
- v. And list the different types under each (3 marks)
- vi. Differentiate between pictorial and orthographic projections as used in engineering drawing.(8 Marks)

QUESTION TWO (15 Marks)

Draw orthographic views using first angle method of projection from the pictorial view given in Fig Q2

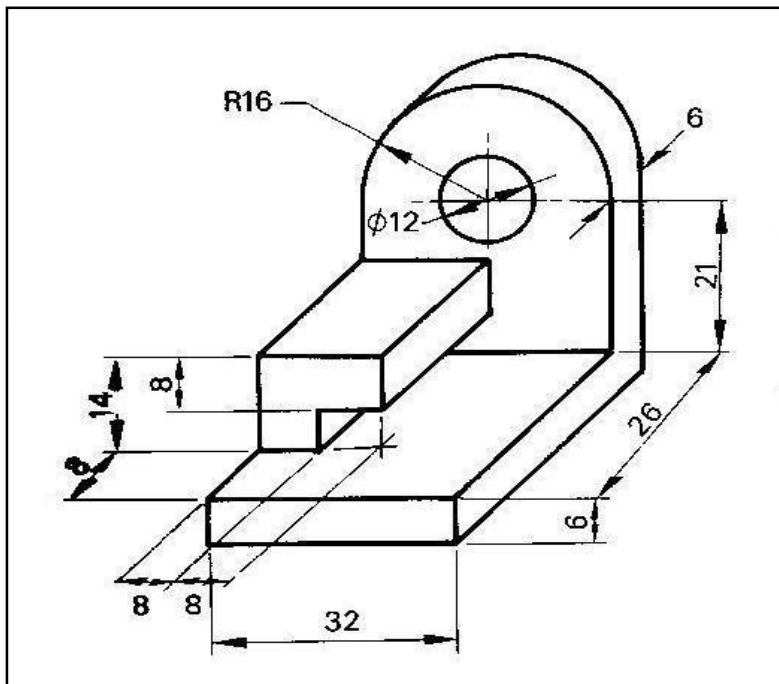


Figure Q2

QUESTION THREE (15 Marks)

Given the orthographic multi-views of an object in Figure Q3, make an isometric drawing of the object

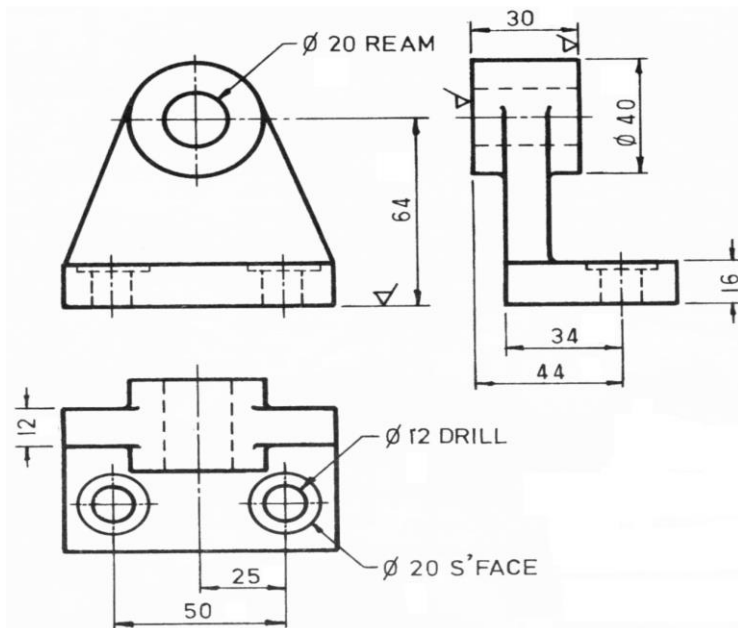


Figure Q3

QUESTION FOUR (15 Marks)

- i. Construct a triangle given Perimeter, $P=20\text{cm}$, Altitude, $L=4\text{cm}$ and vertical angle, $\Theta=40^\circ$
- ii. Construct a hexagon within a circle of diameter 6cm.
- iii. Draw a regular heptagon with sides 38mm long.

QUESTION FIVE (15 Marks)

Draw the isometric views for the two objects whose orthographic views are given in Fig Q5

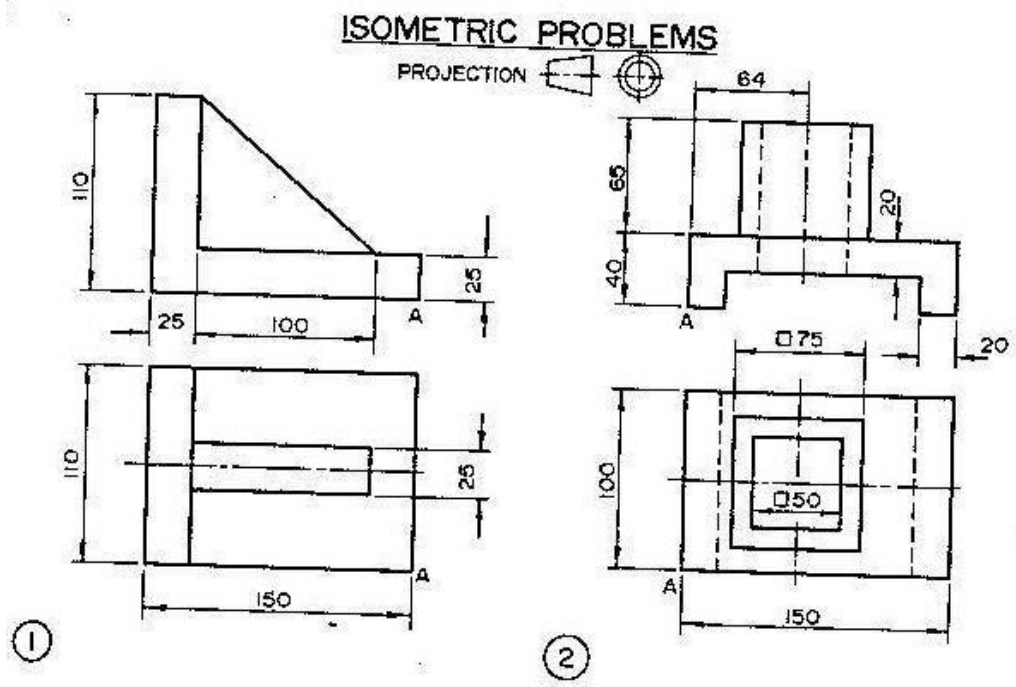


Figure Q5