



MACHAKOS UNIVERSITY

University Examinations for 2019/2020 Academic Year

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

FIRST YEAR SECOND SEMESTER EXAMINATION FOR

BACHELOR OF SCIENCE (CIVIL ENGINEERING)

ECV 100 ENGINEERING DRAWING I

DATE: 16/12/2020

TIME: 8.30-10.30 AM

INSTRUCTIONS

Answer question **ONE** and any other **TWO** questions

QUESTION ONE (30 MARKS)

- a) Draw the third angle orthographic projection of the object in figure 1 (15 marks)

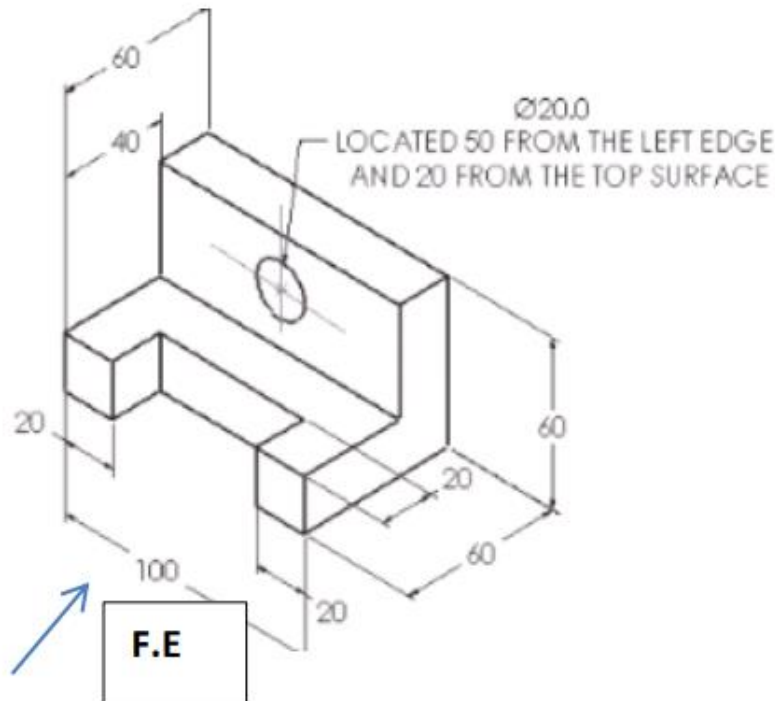


Figure 1

- b) Draw the locus of all points exactly 3cm from PQ (5mks)



- c) Draw the isometric view of the following orthographic projections (10mks)

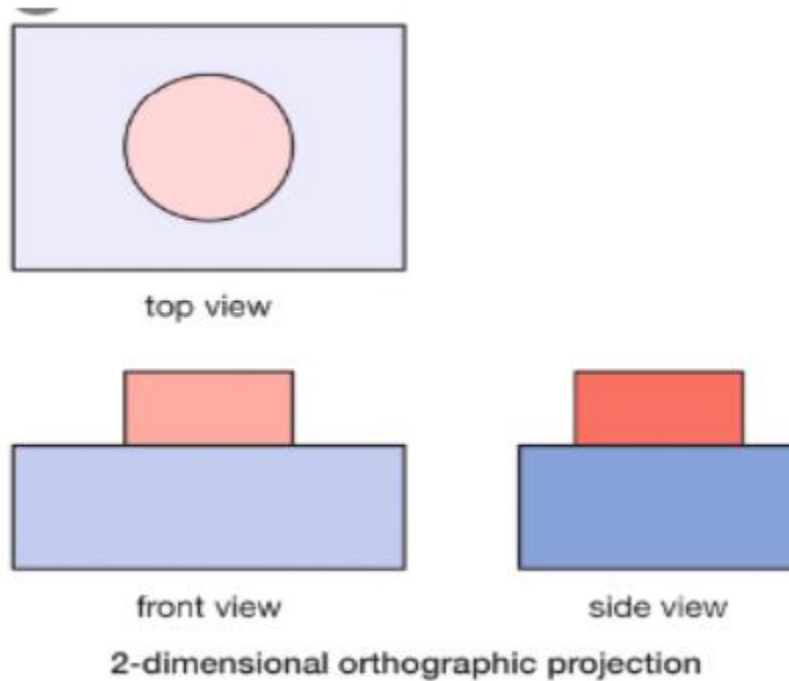


figure Q1c

QUESTION TWO (20 MARKS)

Draw first angle orthographic projection of figure Q2 .The arrow points to F.V

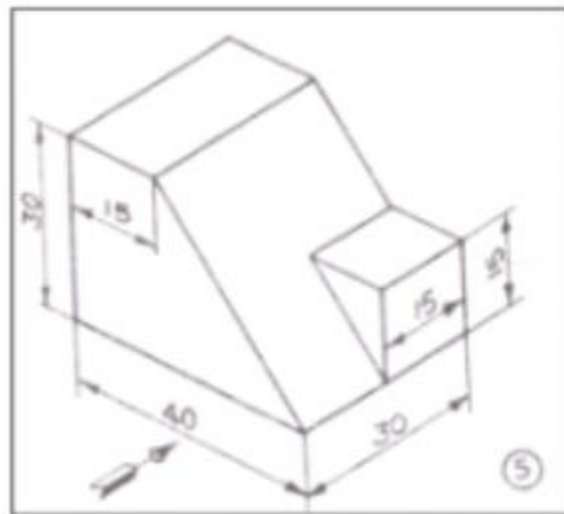


Figure Q2

QUESTION THREE (20 MARKS)

Show the auxiliary view from the object shown in figure Q3

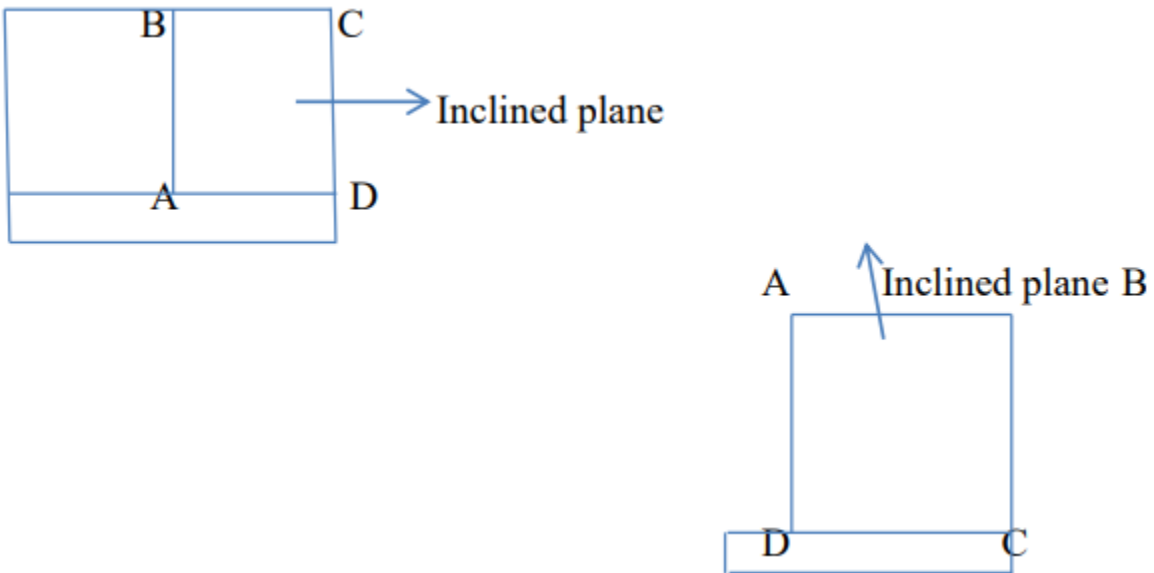


Figure Q3

QUESTION FOUR (20 MARKS)

Draw a parabola if the distance of the focus from the directrix is 60mm

QUESTION FIVE (20 MARKS)

Draw a hyperbola of $e=3/2$ if the distance of the focus from directrix is 50mm