



MACHAKOS UNIVERSITY

University Examinations for 2021/2022

SCHOOL OF ENGINEERING AND TECHNOLOGY

BUILDING AND CIVIL ENGINEERING DEPARTMENT

FIRST SEMESTER FIRST YEAR EXAMINATION FOR

DIPLOMA IN BUILDING AND CIVIL

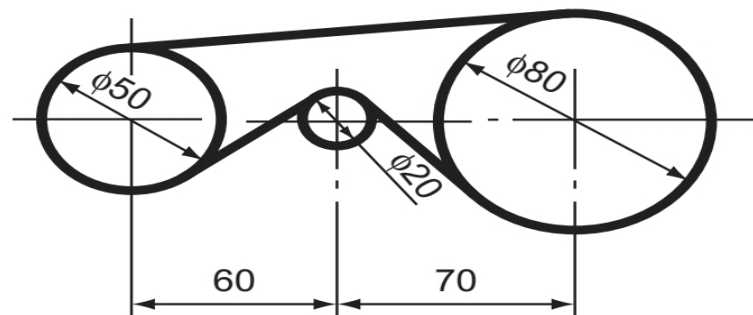
TECHNICAL DRAWING 1

DATE: 3/12/2021

TIME: 8.30-11.30 AM

INSTRUCTIONS:

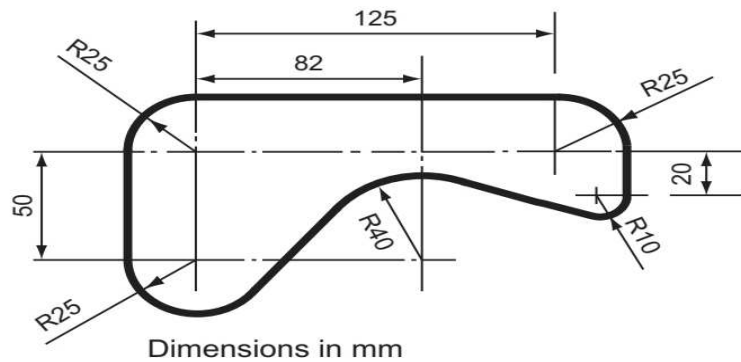
- *This Examination contains Four questions*
 - *Attempt all questions*
 - *Each question contains equal marks*
1. Construct a regular heptagon with a circle, radius 60mm. The corners of the heptagon must lie on the circumference of the circle. 17.5marks
 2. Draw the figure, full size, showing clearly the constructions for obtaining the points of the belt and pulleys



Dimensions in mm

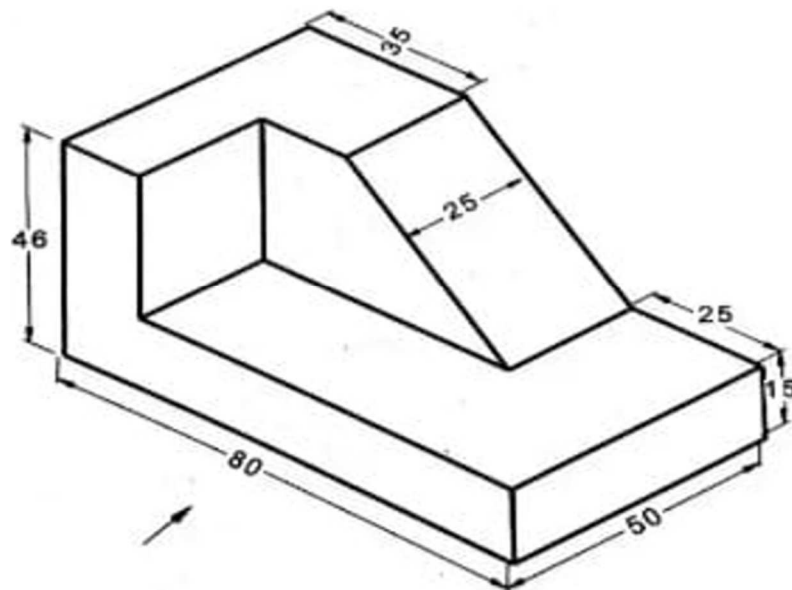
17.5marks

3. The figure below shows the outline of metal blank, Draw the blank, full size, showing clearly the constructions for finding exact positions of tangents joining the arc



17.5marks

4. Draw the pictorial block in first angle projection, dimensions are in millimeters



17.5 marks