



MACHAKOS UNIVERSITY

University Examinations for 2020/2021

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

FIRST YEAR FIRST SEMESTER EXAMINATION FOR
CRAFT CERTIFICATE IN ELECTRICAL AND ELECTRONICS

1604/104: TECHNICAL DRAWING.

DATE: 6/9/2021

TIME: 11:30 – 2:30 PM

INSTRUCTIONS:

Answer ALL the questions.

1. (a) Use sketches to differentiate between:
 - (i) Orthographic and pictorial drawings.
 - (ii) Cabinet and Cavalier oblique drawing.
 - (iii) Third and First angle projections
 - (iv) Oblique and Perspective drawing. (20 marks)
2. Figure 1 shows views of a machine block drawn in First angle projection. Make a FREEHAND oblique view of the block. Do not dimension the drawing. (20 marks)
3. Figure 2 shows orthographic elevations of a machined block drawn in Third angle projection. Draw full-size the isometric view of the block taking A as the lowest point. (20 marks)
4. Given on Figure 3 is an Isometric block. Draw the following in Third angle projection:
 - (a) Front elevation in the direction of arrow B
 - (b) End elevation
 - (c) The planInclude six main dimensions. (20 marks)

5. (a) List six Main information included in the title block. (3 marks)
- (b) Draw the symbol for First angle projection. (2 marks)
- (c) Make FREEHAND pictorial sketch for any THREE of the following hand tools:
- (i) Open end spanner
 - (ii) Flat screw driver
 - (iii) Twist drill bit.
 - (iv) Electric soldering iron (15 marks)