



MACHAKOS UNIVERSITY

University Examinations 2017/2018

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF MECHANICAL AND MANUFACTURING ENGINEERING

FIRST YEAR FIRST SEMESTER EXAMINATION FOR CERTIFICATE IN MECHANICAL ENGINEERING

MED-PR 107: ENGINEERING DRAWING I

DATE: 13/12/2017

TIME: 8:30 – 10:30 AM

INSTRUCTIONS

This paper consists of *FIVE* questions

Answer question *ONE* (compulsory) and any other *TWO* questions

You need the following for this examination:

- Drawing papers
- Drawing Instruments

QUESTION ONE (30 MARKS)

- a) Draw a circle to pass through the three corners of the triangle ABC in figure 1.
- b) Construct the plastic template shown in figure 2.
- c) Figure 3 shows a cast iron casting. Draw in first angle projection the following views:
 - Front elevation from the direction of arrow F.
 - An end elevation from the direction of arrow E.
 - A plan.

QUESTION TWO (20 MARKS)

Shown in figure 4 views of a machined block drawn in first angle orthographic projection. Draw it
In isometric projection with corner X as the lowest point.

QUESTION THREE (20 MAERKS)

Draw the isometric projection of the block shown in figure 5.

QUESTION FOUR (20 MARKS)

Figure 6 shows an oblique view of a casting. Draw the following views in third angle projection:

- Front elevation in the direction of arrow A.
- An end elevation in the direction of arrow B.
- A plan
- Insert SIX major dimensions.

QUESTION FIVE (20 MARKS)

Figure 7 shows SIX isometric blocks A, B, C, D, E, F with their THREE orthographic views randomly shown

Below them. Match the views with their block and enter them in the table as shown for block A.