



# MACHAKOS UNIVERSITY

University Examination 2018/2019

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

FIRST YEAR SECOND SEMESTER EXAMINATION FOR

DIPLOMA IN ELECTRICAL AND ELECTRONIC ENGINEERING

EED 110 TECHNICAL DRAWING

DATE: 8/5/2019

TIME: 2.00-4.00 PM

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## INSTRUCTIONS:

Answer question one and any other two questions

### QUESTION ONE (30 MARKS).

- a) Sketch the figure 1 in oblique (10 marks)
- b) Draw the following electrical symbols
  - i. Capacitor
  - ii. Inductor
  - iii. Variable Resistor
  - iv. AC source
  - v. npn Transistor
  - vi. Light Emitting Diode
  - vii. Fuse
  - viii. Earth
  - ix. Potentiometer
  - x. Generator (10 marks)
- c) Draw the development of a 40X60X50 cubboid (10 marks)

## **QUESTION TWO (20 MARKS)**

Draw the following electrical circuit's figures.

- a) A circuit of a switch, a generator, a fuse, a resistor, an ammeter, and a voltmeter.
- b) A circuit of a  $V_{cc}$ , a light sensitive resistor, a  $R_B$  and two n-p-n transistors in series.

(20 marks)

## **QUESTION THREE (20 MARKS)**

- a) Draw the symbol for third projection
- b) Sketch the figure 3 in third angle projection

(3 marks)

(17 marks)

## **QUESTION FOUR (20 MARKS)**

- a) Differentiate oblique from isometric projection
- b) sketch the figure 2 in cabinet projection

(5 marks)

(15 marks)

## **QUESTION FIVE (20 MARKS)**

- a) Name and draw five types of lines in technical drawing
- b) Draw the development of the figure 4 include at least four dimensions

(10 marks)

(10 marks)