



# MACHAKOS UNIVERSITY COLLEGE

(A Constituent College of Kenyatta University)  
University Examinations for 2014/2015

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

FIRST SEMESTER EXAMINATION FOR DIPLOMA IN ELECTRICAL  
ENGINEERING (POWER OPTION)

2601/203: ENGINEERING DRAWING AND CIRCUIT ANALYSIS (AUTO CAD)

DATE: 23/3/2015

TIME: 8:30 – 10:30 am

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## *Instructions*

### **Attempt all questions**

1. (a) The figure 1 alongside shows the floor plan of a two bedroom house
  - (i) Sketch the traverse using appropriate tools and the following settings.
    - (i) Units in millimeters
    - (ii) Accuracy/precision 0
    - (iii) Line weights 0.4
    - (iv) Line colour on which to draw the drawing cian
    - (v) Text height = 150 (both letters and numbers)
    - (vi) Text style –verdama (20 marks)
2. (a) List down all the commands used to design the traverse below the drawing under the heading “ledged” (4 marks)
  - (b) (i) Insert the electrical wiring circuit into the house plan in question (i) detailing all the necessary switch symbols  
NB: The electrical detailed diagram to be separate from the first drawing. (14 marks)
  - (ii) List all the electrical symbols use under ledged. (2 marks)

3. (a) Set up the Autocad according to the following guidelines

(i) Line weight = 0.4

(ii) Text style = verdana

(iii) Text height = 4

(iv) Text colour = blue

(6 marks)

(b) Draw the traverse in fig 1. and insert the dimensions accordingly.

(14 marks)

4. Figure 3 shows a plan of a machine spare parts. Draw the figure and insert the dimensions accordingly. (20 marks)

Use the following settings

- (i) Line weight - 0.3
- (ii) Text style - Papyrus
- (iii) Text colour - Green
- (iv) Dimension line weight – 0.09
- (v) Extension line weight – 0.09

5. The figure 4 alongside shows the plan of gasket. Draw the figure and insert all the dimension. (20 marks)

Use the following settings

- (i) Text height - 0.4
- (ii) Text colour – red
- (iii) Text style - verdance