



MACHAKOS UNIVERSITY

University Examinations for 2019/2020 Academic Year

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF MECHANICAL AND MANUFACTURING ENGINEERING

SECOND YEAR SECOND SEMESTER EXAMINATION FOR

BACHELOR OF SCIENCE IN ELECTRICAL AND ELECTRONICS ENGINEERING

EEE 210 AUTOCAD

DATE: 16/12/2020

TIME: 8.30-10.30 AM

INSTRUCTIONS

1. This paper contains **five** questions to be answered using computer aided drawing software.
2. Attempt **question one** [compulsory] and **any other two questions**.
3. Allow 1½ hours for question one and 45 minutes for each of the other two questions.
4. All dimensions are in **millimetres** unless otherwise stated.
5. Open a new drawing **Acadiso** template for each question.
6. All the files opened and used should be saved using **question number** names and in a folder on a **desktop**. Name the folder using your **registration number**. Remember to save your work regularly as you draw.

QUESTION ONE (COMPULSORY) (30 MARKS)

- (a) Use Autodesk **AutoCAD** to reproduce Front, Top and Side views of the **orthographic views** shown in **Figure Q1 (a)**. Show all dimensioning indicated and construction lines. Draw the borderline and the title block. (15 marks)
- (b) Use Autodesk AutoCAD to reproduce a 3D object represented by the isometric drawing shown in **Figure Q1 (b)**. Use shades of grey visual style. Do not include the dimensions and the title block. (15 marks)

QUESTION TWO (20 MARKS)

Use Autodesk **AutoCAD** to draw Front, Top and Right Side views of the isometric drawing shown in **Figure Q2**. Sufficient dimensioning is to be indicated. Use either first angle projection. Include the borderline and title block. Front view is indicated by the arrow F.

QUESTION THREE (20 MARKS)

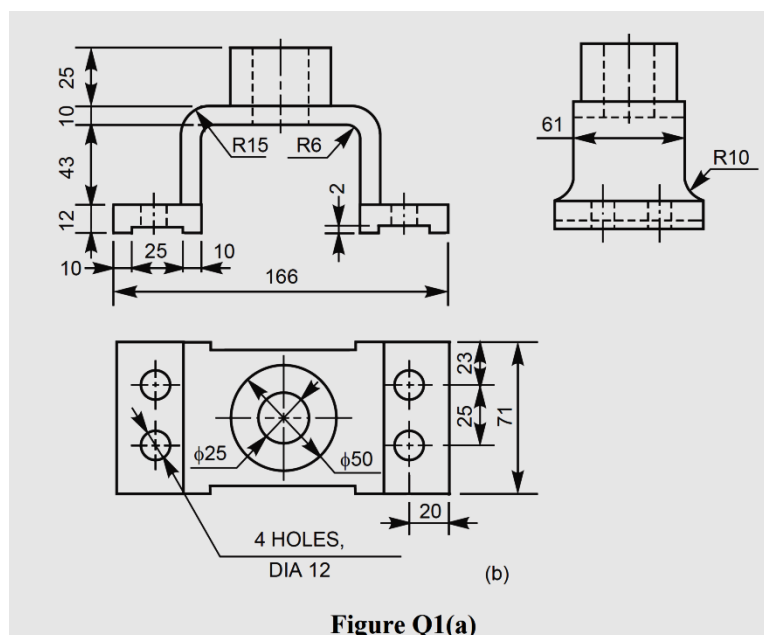
Use Autodesk **AutoCAD** to draw a 3D object represented by the views as shown in **Figure Q3**.
Use shades of grey visual style. Do not indicate the dimensions and title block.

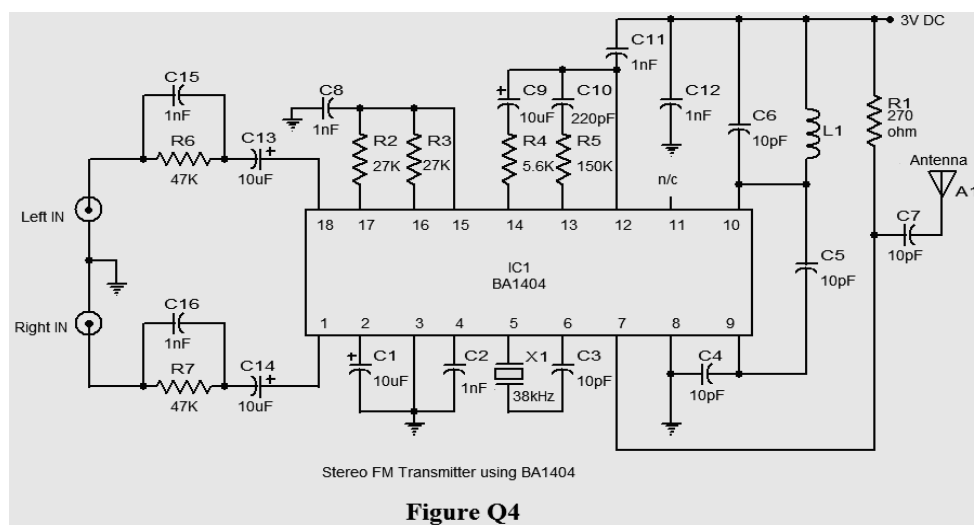
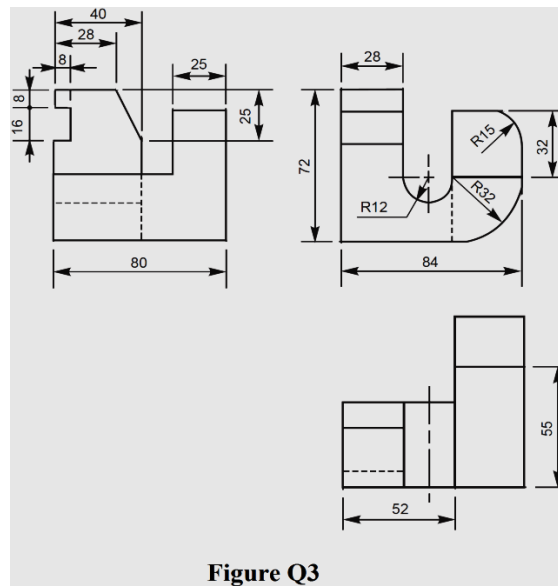
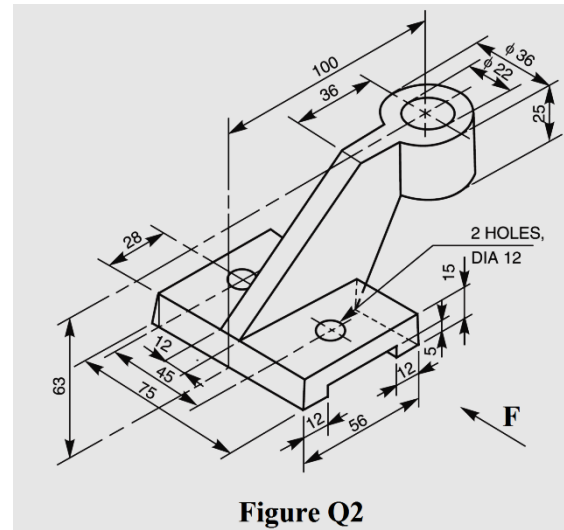
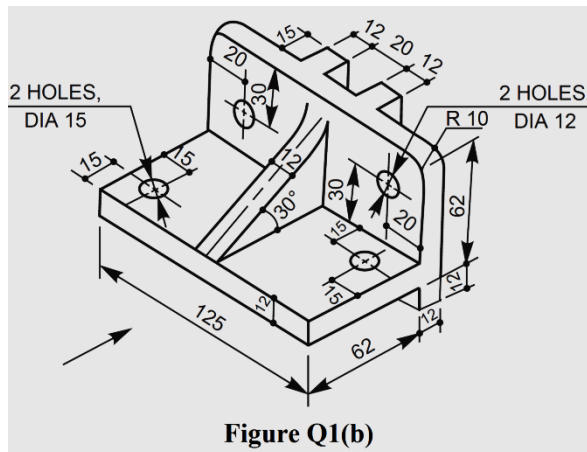
QUESTION FOUR (20 MARKS)

Reproduce a schematic diagram of an electrical circuit shown in **Figure Q4** using Autodesk **AutoCAD**. Use any appropriate dimensioning. Include the borderline and title block.

QUESTION FIVE (20 MARKS)

Reproduce a schematic diagram of a process flow shown in **Figure Q5** using Autodesk **AutoCAD**. Use any appropriate dimensioning. Include the borderline and title block.





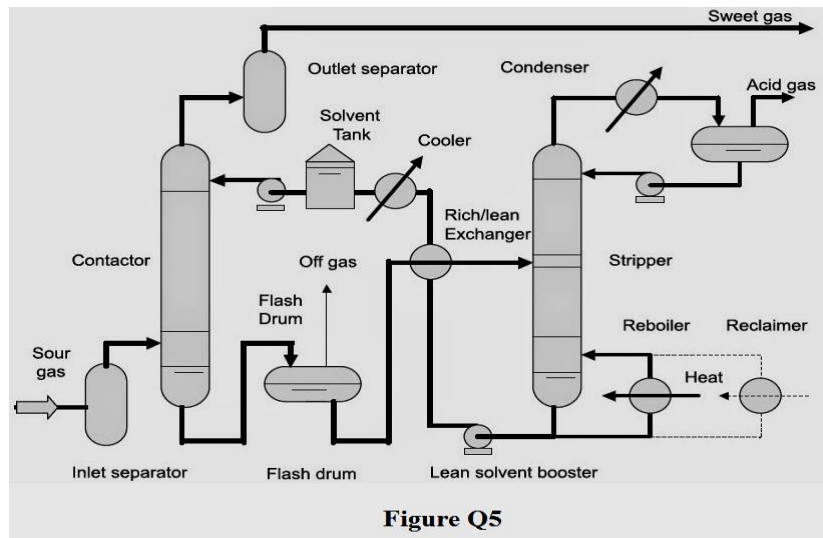


Figure Q5