#### BINDURA UNIVERSITY OF SCIENCE EDUCATION

#### FACULTY OF SCIENCE AND ENGINEERING

## DEPARTMENT OF ENGINEERING AND PHYSICS

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**PROGRAMME** 

Bachelor of Science (Honours) Degree in Agricultural Engineering Bachelor of Science (Honours) Degree in Electronic Engineering

COURSE CODE (s) END 1102 (2): ENGINEERING DRAWING

**DURATION: 4 hours** 

**TOTAL MARKS: 100** 

#### INSTRUCTIONS TO CANDIDATES

- 1. This paper contains 5 questions. Each question carries 25 marks.
- 2. Answer all question in section A and two questions in section B.
- 3. All the drawings must be drawn on A3 or A4 drawing paper and choose an appropriate scale for the drawings.
- 4. All dimensions are in millimeters.

## Section A: answer all questions.

#### Question 1.

a. State two essential aspects that a good drawing must meet.

[10 marks]

b. Mention three types of technical drawing.

[15 marks]

## Question 2.

Fig. Q2 shows a machine component, draw using the first angle projection:

a. The sectional view from the front with dimensioning and,

[15 marks]

b. The top view with dimensioning.

[10 marks]

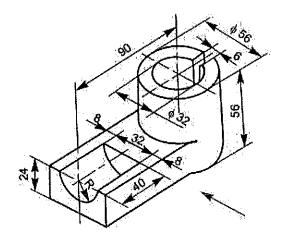


Fig. Q2.

# Section B: answer two questions.

## Question 3.

Build up a sectioned assembly drawing of the component parts shown in Fig. Q3, looking on cutting plane CC to obtain a sectional front view by tracing over and correctly positioning each piece:

[25 marks]

Part list:

Nr.	Name	Quantity
1	Hexagonal headed bolt	1
2	Nut	1
3	Separator	1
4	Housing	1

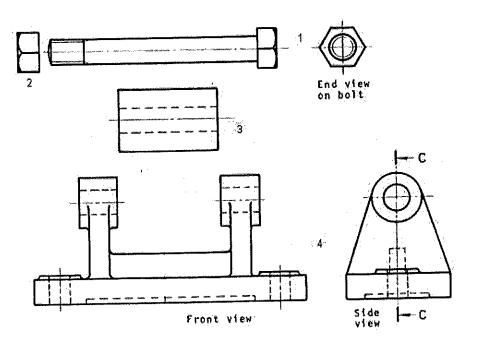


Fig. Q3.

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## Question 4.

Draw and dimension the drawing shown in Fig. Q4:

[25 marks]

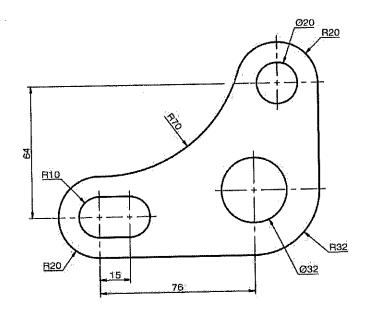


Fig. Q4.

## Question 5.

Draw the isometric projection of the object shown in Fig. Q5.

[25 marks]

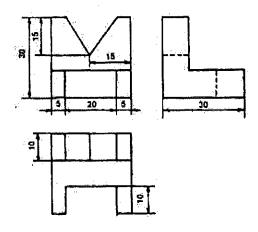


Fig. Q5.

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