#### BINDURA UNIVERSITY OF SCIENCE EDUCATION

#### **FACULTY OF SCIENCE AND ENGINEERING**

**AEH 101/EEN 1102** 

**Department of Engineering and Physics** Bachelor of Science (Honours) Degree in Agricultural Engineering Bachelor of Science (Honours) Degree in Electronic Engineering

### **Engineering Drawing**

4 hours (100 Marks)

#### Instructions:

- NOV 2003 1. This paper contain 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 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 shaft support, draw using the first angle system:

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

[15 marks]

b. the top view with dimensioning.

[10 marks]

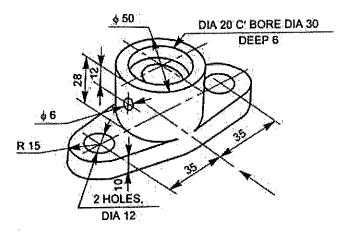


Fig. Q2.

## Section B: answer two questions.

## Question 3.

Assemble the parts of a knuckle joint, shown in Fig. Q3 and draw:

a. Sectional view form the front and,

[15 marks]

b. View from above component.

[10 marks]

#### Part list:

1 4,1 6 1,1 = 1		
Nr.	Name	Quantity
1	Fork end	1
2	Eye end	1
3	Pin	1
4	Collar	1
5	Taper pin	1

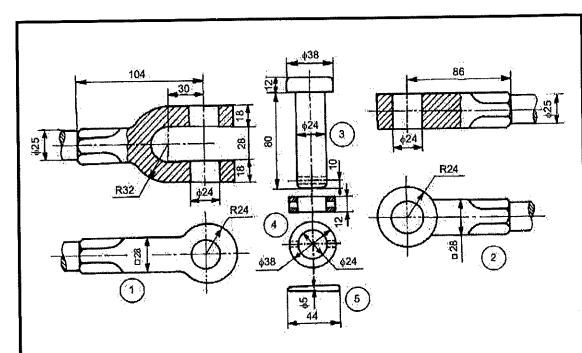


Fig. Q3.

# Question 4.

Draw the following diagram in fig. Q4 with dimensioning.

[25 marks]

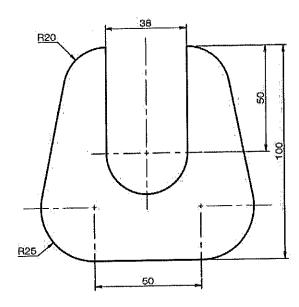


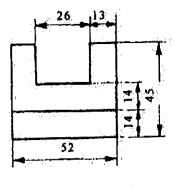
Fig. Q4.

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

[25 marks]



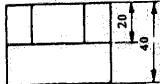


Fig. Q5.