BINDURA UNIVERSITY OF SCIENCE EDUCATION

FACULTY OF SCIENCE AND ENGINEERING

DEPARTMENT OF ENGINEERING AND PHYSICS

JUN 2025

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

COURSE CODE (s) END 1102 (3): 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. [25 marks]
a. Describe an orthographic projection. [7 marks]
b. Mention the six basic views in orthographic projection. [18 marks]

Question 2.
Figure Q2 shows a machine component, draw using the first angle system: [25 marks]
a. the sectional view from the front with dimensioning and, [15 marks]
b. the top view with dimensioning. [10 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]**

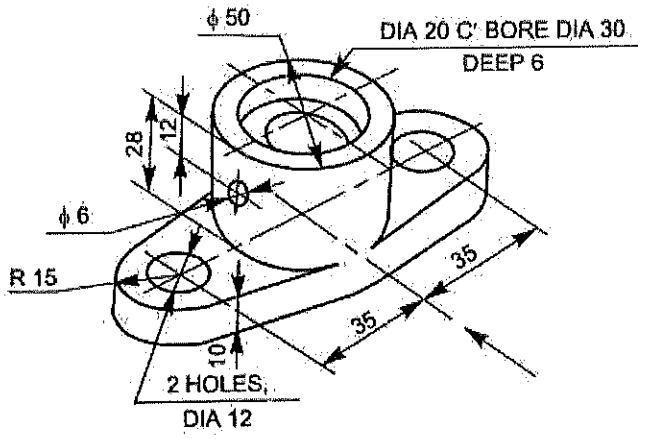

Fig. Q2.

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 by tracing over and correctly positioning each part.

[25 marks]

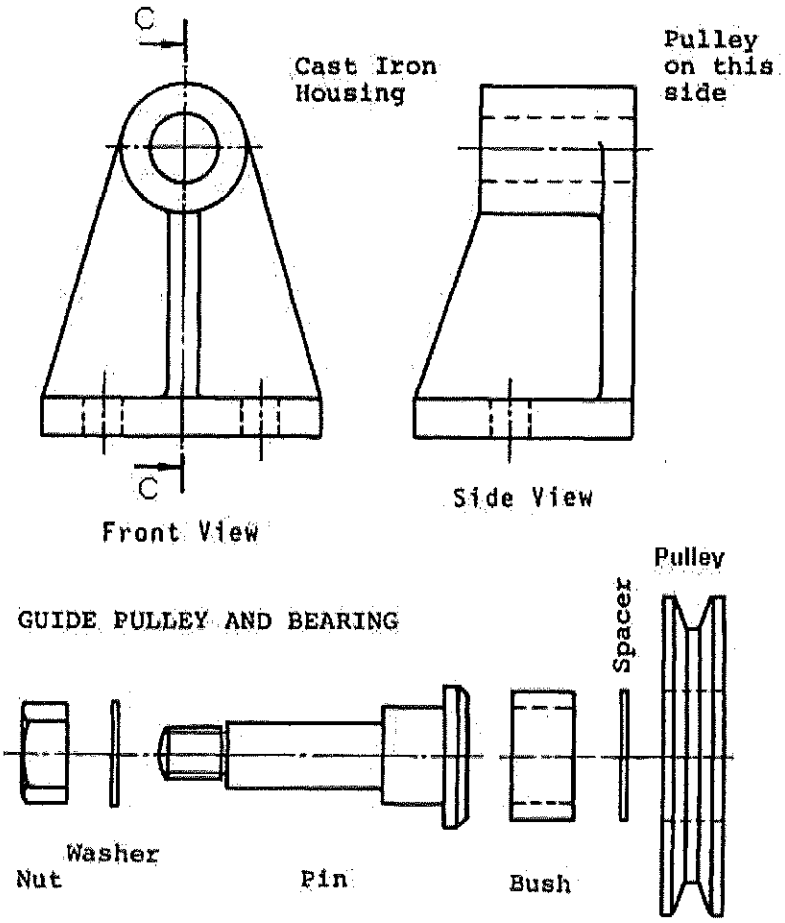

Fig. Q3.

Question 4.

Draw and dimension the part shown in Fig. Q4: **[25 marks]**

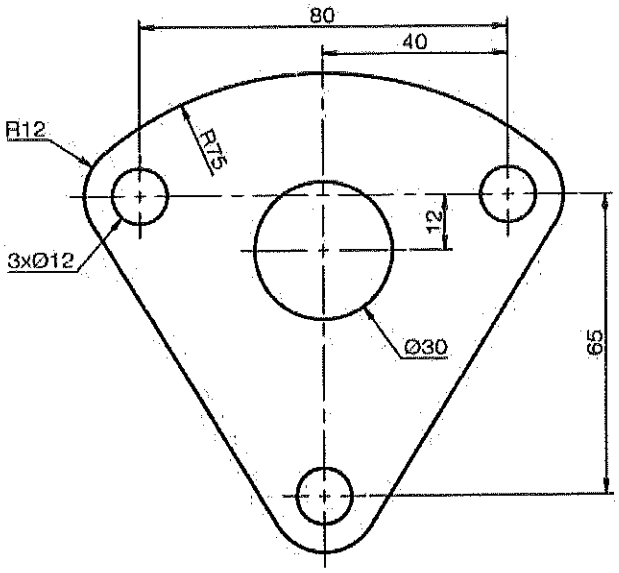

Fig. Q4.

Question 5.

Draw the isometric projection of the object shown in Fig. Q5. **[25 marks]**

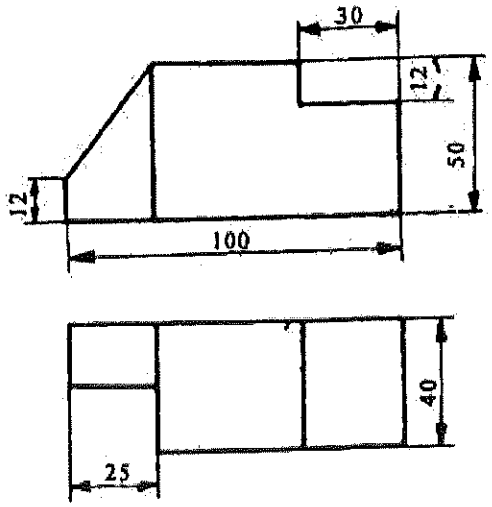

Fig. Q5.