

MECHANICAL DRAWING -- ORDINARY LEVEL

12047

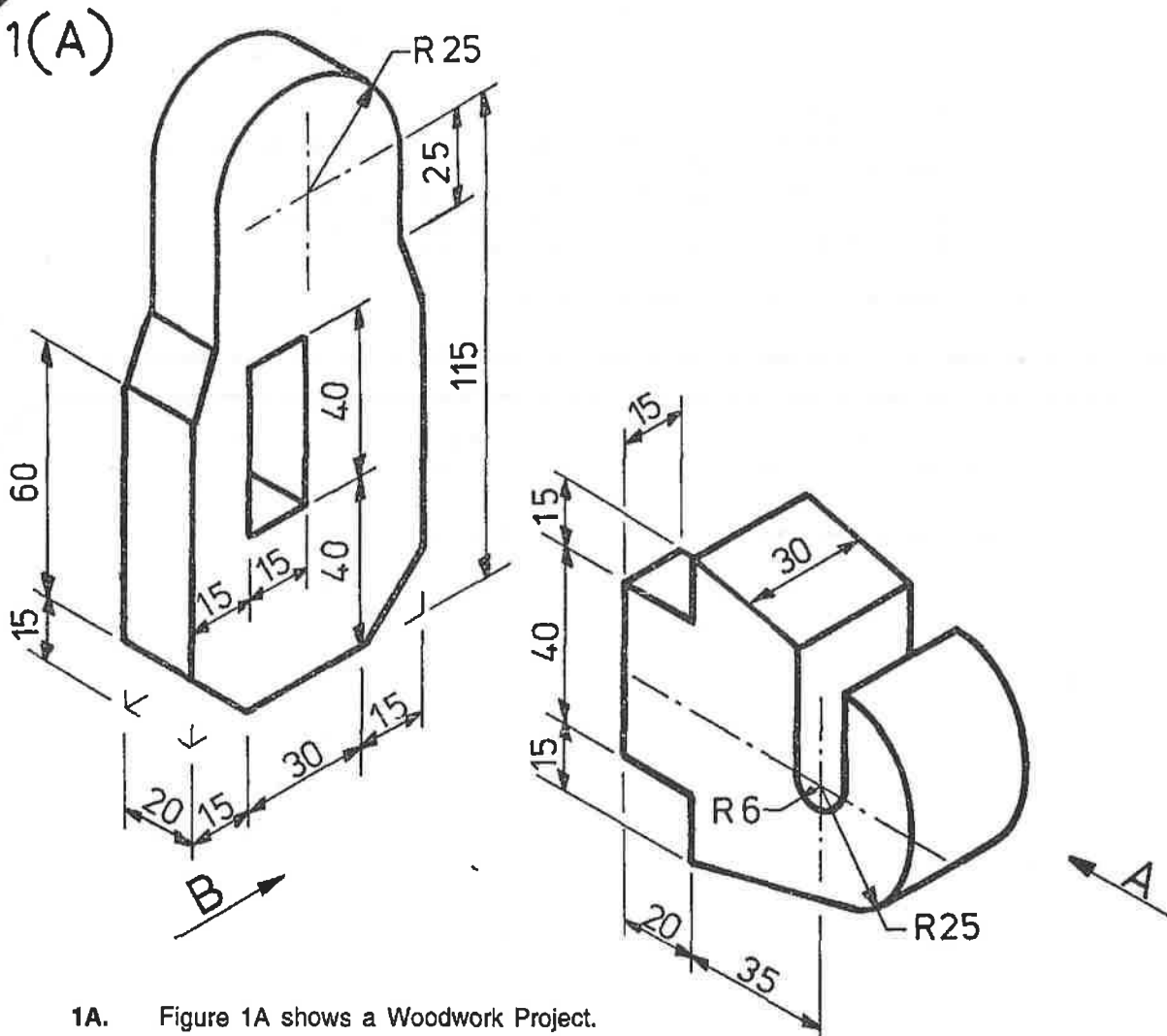
THURSDAY, 17 JUNE - 2.00 to 4.30

INSTRUCTIONS

- (a) Not more than four questions may be attempted; two of these must be selected from Section 1 and two from Section 2.
- (b) Question No. 1 is compulsory and candidates may choose either 1(A) or 1(B). The number of the question must be distinctly marked by the side of each answer.
- (c) All questions carry equal marks; a maximum of five marks will be awarded for accuracy and neatness of arrangement in respect of each question.
- (d) Work on one side of the paper only.
- (e) Examination number must be distinctly marked on each sheet of paper used.

SECTION 1

Answer 1(A) or 1(B) and one other question from this Section



- 1A. Figure 1A shows a Woodwork Project.
- (i) Make a full size drawing of the assembled project showing:-
 - (a) A front elevation looking in the direction of arrow A,
 - (b) An end elevation looking in the direction of arrow B,
 - (c) A plan projected from the front elevation.
 - (ii) Insert the title of each view and any four dimensions.

OVER->

1 (B)

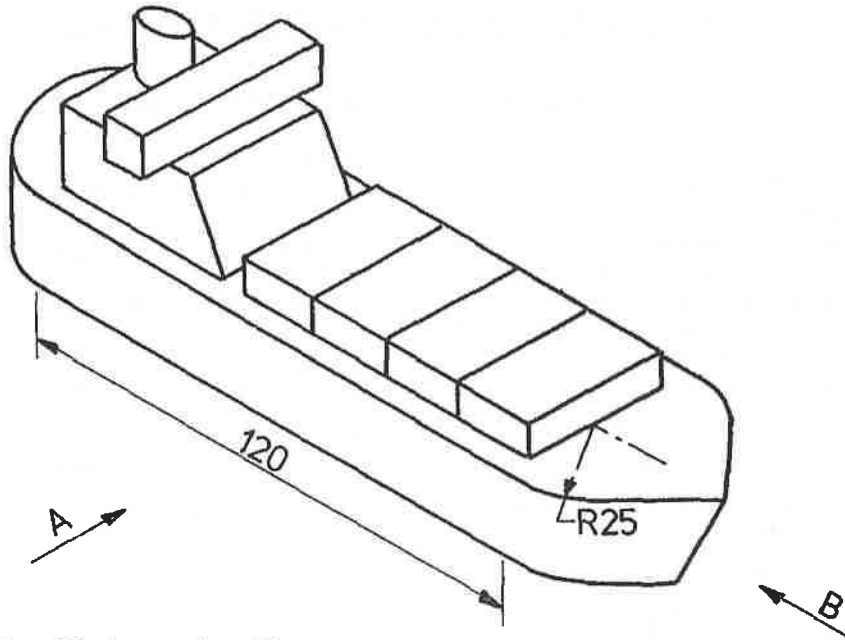
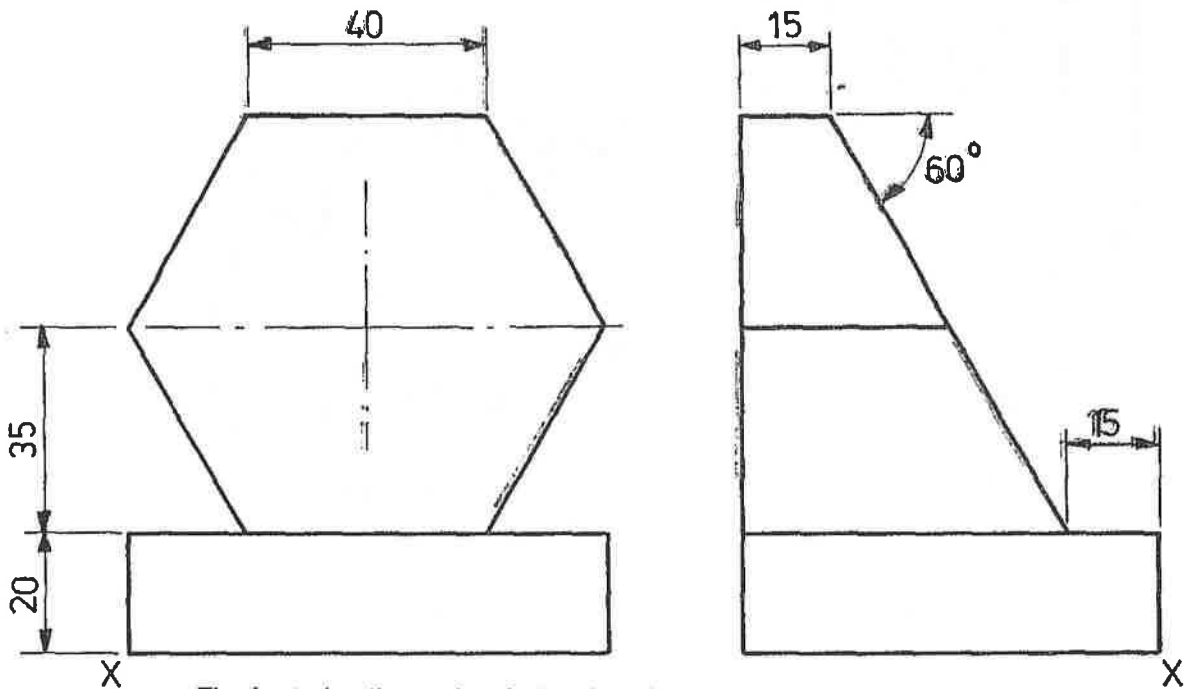


Figure 1B shows a toy ship.

- (i) On the squared paper supplied, draw freehand, approximately full size and in good proportion the following:-
- A front elevation looking in the direction of arrow A,
 - An end elevation looking in the direction of arrow B,
 - A plan projected from the front elevation.
- (ii) Insert the title of each view and any four dimensions.

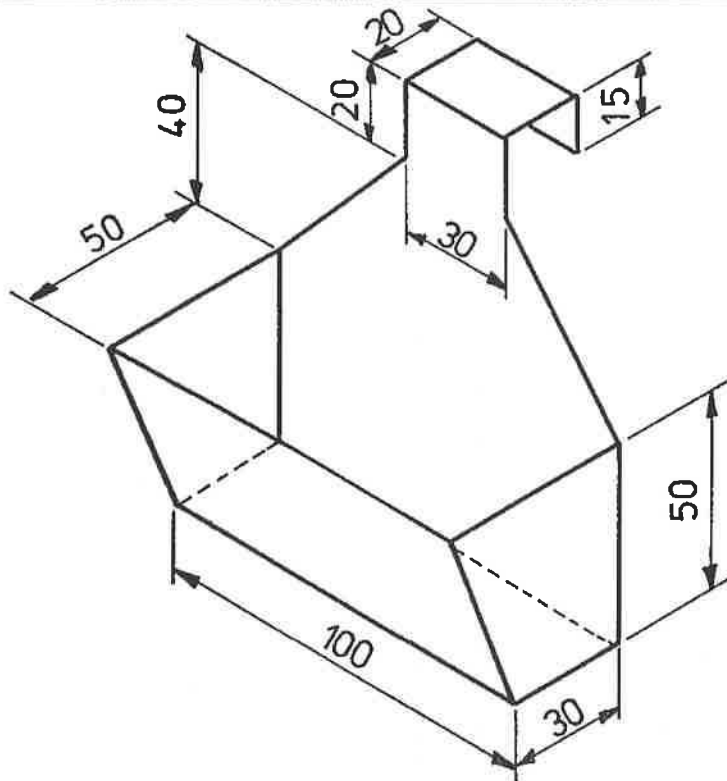
2



The front elevation and end elevation of a shaped solid are shown in Figure 2. Draw full size one of the following views:

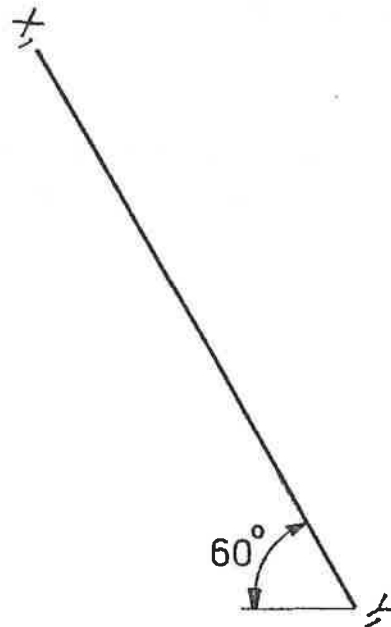
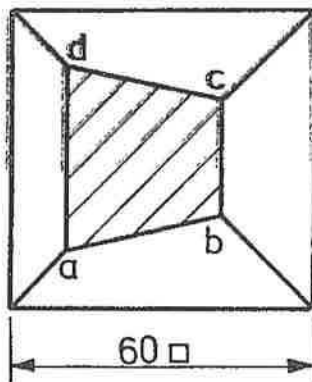
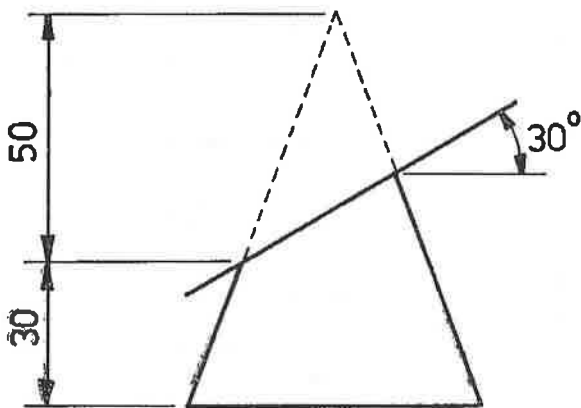
- An ISOMETRIC VIEW, with point X the lowest point on the drawing,
- OR
- An OBLIQUE VIEW, drawn to the left hand side.

3



Draw full size the total surface development of the container shown in Figure 3.

4



The front elevation and plan of a cut square based pyramid are shown in Figure 4. Draw full size:-

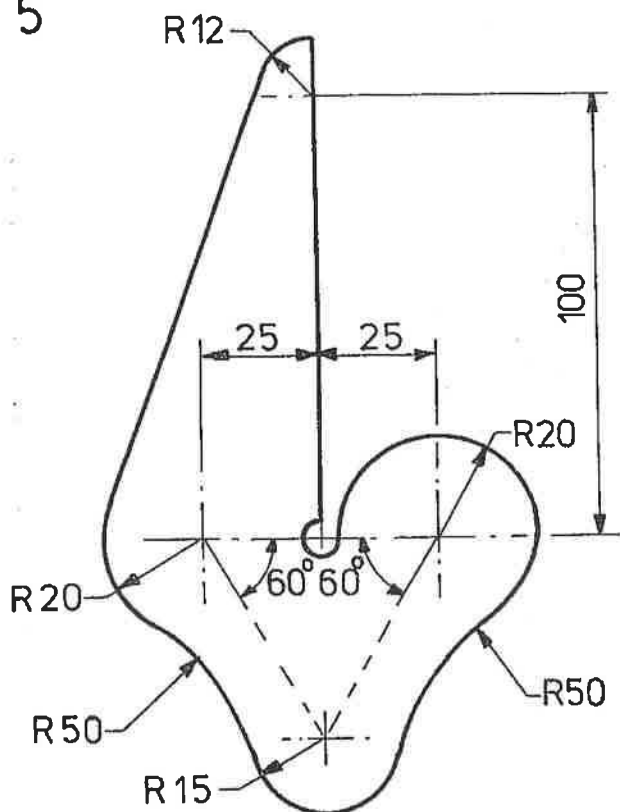
- (a) The given elevation and plan.
- (b) An auxiliary elevation on the X_1Y_1 line
- (c) Index points a, b, c and d on all views.

OVER->

SECTION II

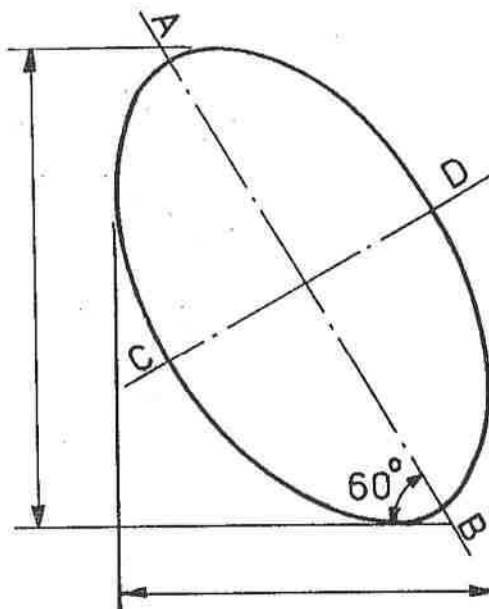
Answer any two questions from this section

5



Draw full size the outline of the centre square shown in Figure 5.
NOTE: All construction lines must be clearly shown.

6

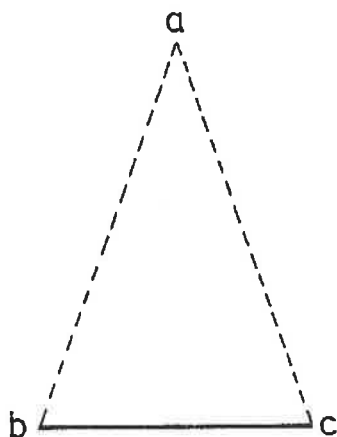


Draw full size:-

- (a) The outline of the football [Ellipse] as shown in Figure 6, Major axis 140 mm, minor axis 80 mm.
- (b) Measure and write down the length and the height as indicated.

NOTE: All construction lines must be clearly shown.

7

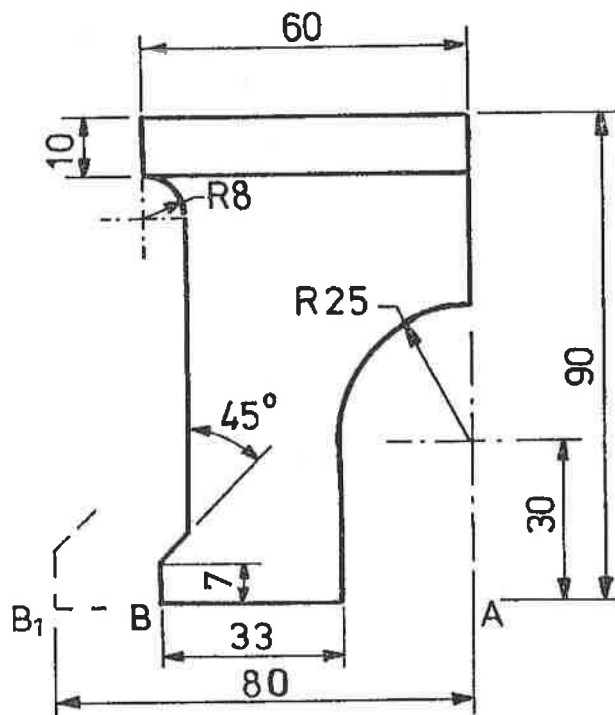


Draw full size:-

- (a) A line 200 mm long.
- (b) Divide the line into the ratio of 8:5:8 and then draw the triangle ABC as shown in Figure 7.
- (c) Using the side bc of the triangle construct a regular pentagon.

NOTE: All construction lines must be clearly shown.

8



A design for a mantelpiece is shown in Figure 8. Draw full size:-

- (a) The given design
- (b) A similar mantelpiece increasing the length AB to 80 mm and all other dimensions in the same proportion.

NOTE: All construction lines must be clearly shown.