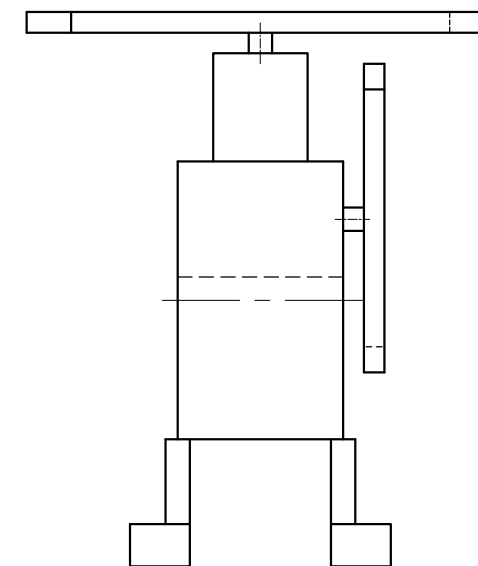
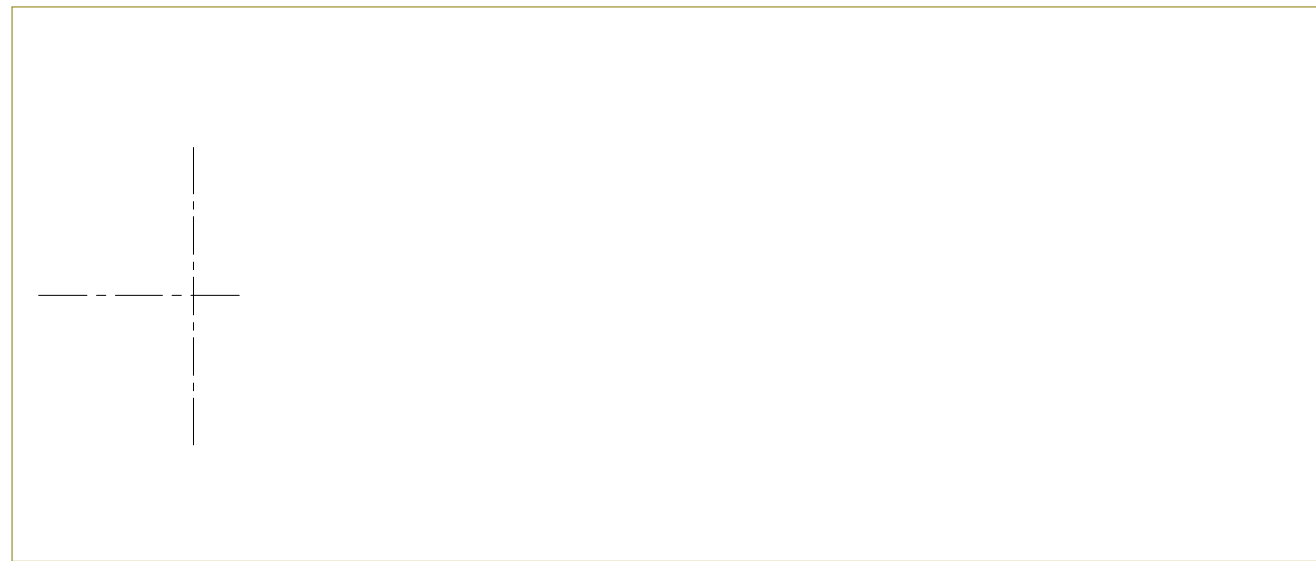
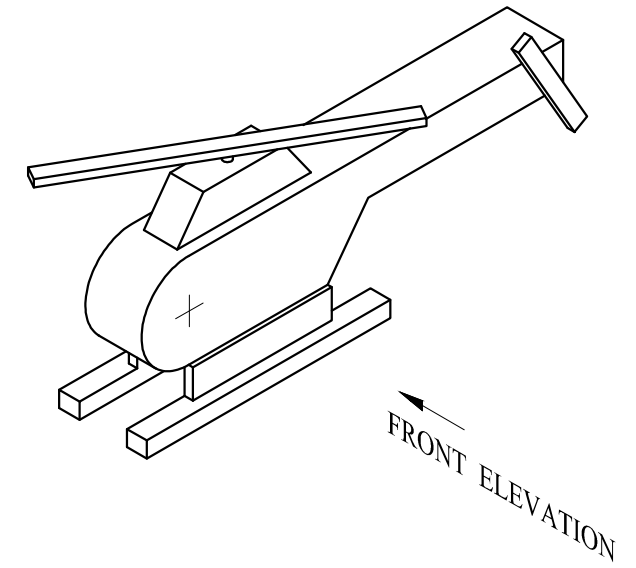


1. A pictorial view and two orthographic views of a toy helicopter are given.

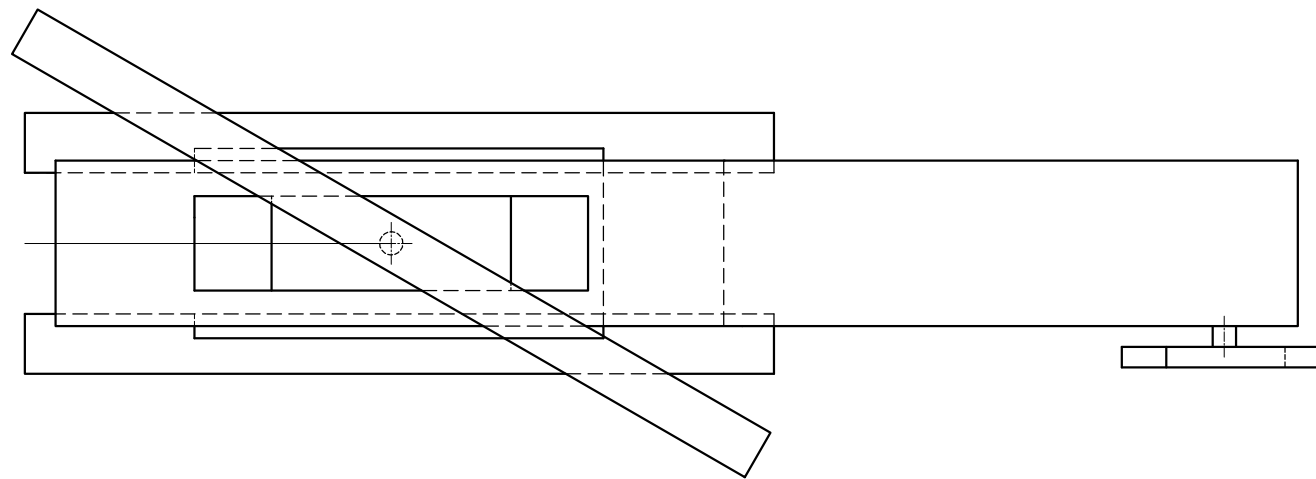
- a) Draw the front view in the direction of the arrow.
- b) Label the front view and the correct symbol of projection.
- c) Shade (in colour or pencil) the pictorial view.

Note: The centre lines of the curved part of the front elevation are already drawn.

16 marks



END VIEW



PLAN



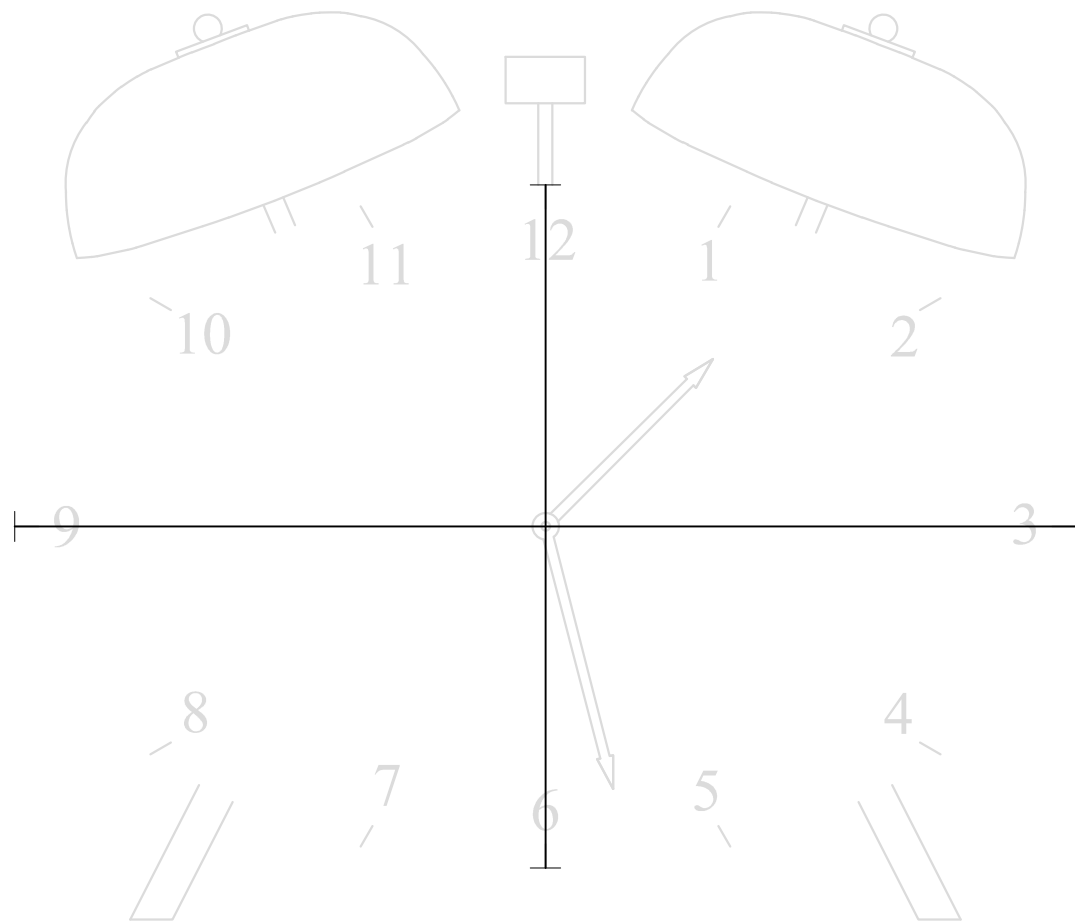
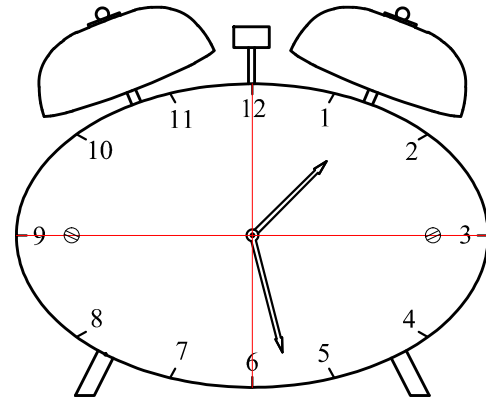
ANGLE PROJECTION

2. The alarm clock shown at the side has an elliptical face. Two tiny screws are fixed to the clock face exactly at the focal points.

- a) Complete the clock started below by constructing an ellipse on the given major and minor axes.
- b) Find the two focal points (foci) of the ellipse.

Notes: 1. Do not draw the screws.
2. Leave all faint construction lines.

12 marks

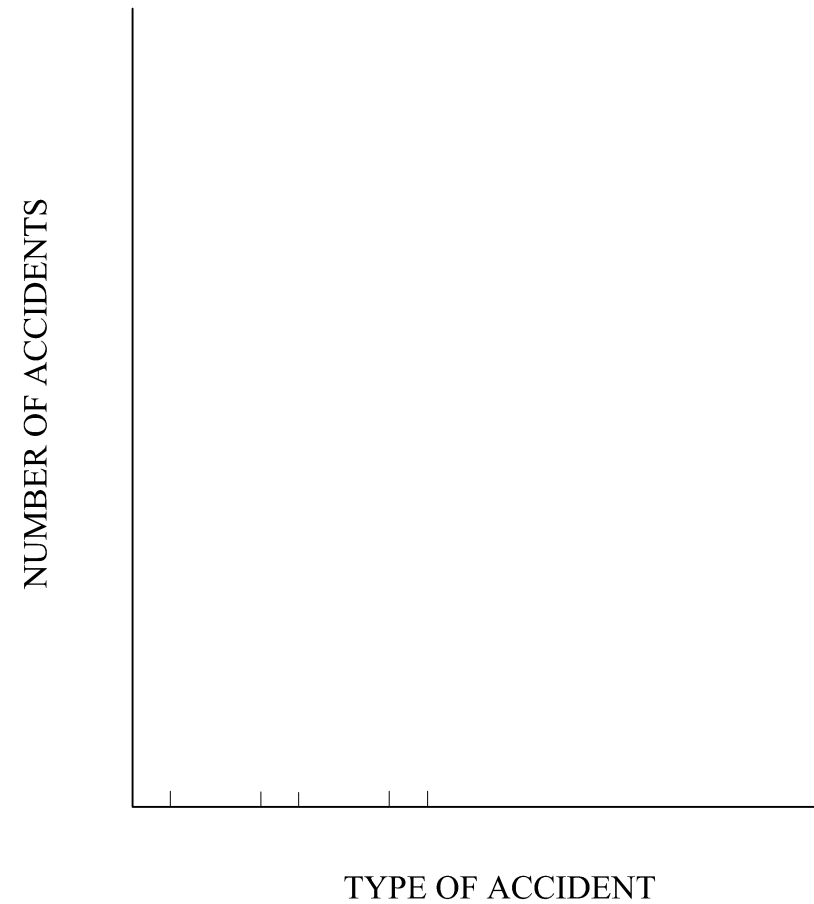


3. In a particular city, road accidents happening over a period of time, were recorded and classified as follows:

- 40 accidents involved trucks,
- 90 accidents involved cars,
- 55 accidents involved motorbikes,
- 30 accidents involved bicycles and
- 45 accidents involved pedestrians.

- a) Using the given start lines draw a vertical bar graph with five columns to explain graphically the relationship between each of the above accidents. Use a scale of 10mm to represent 10 accidents.
- b) Add colour and notation making use of the key.

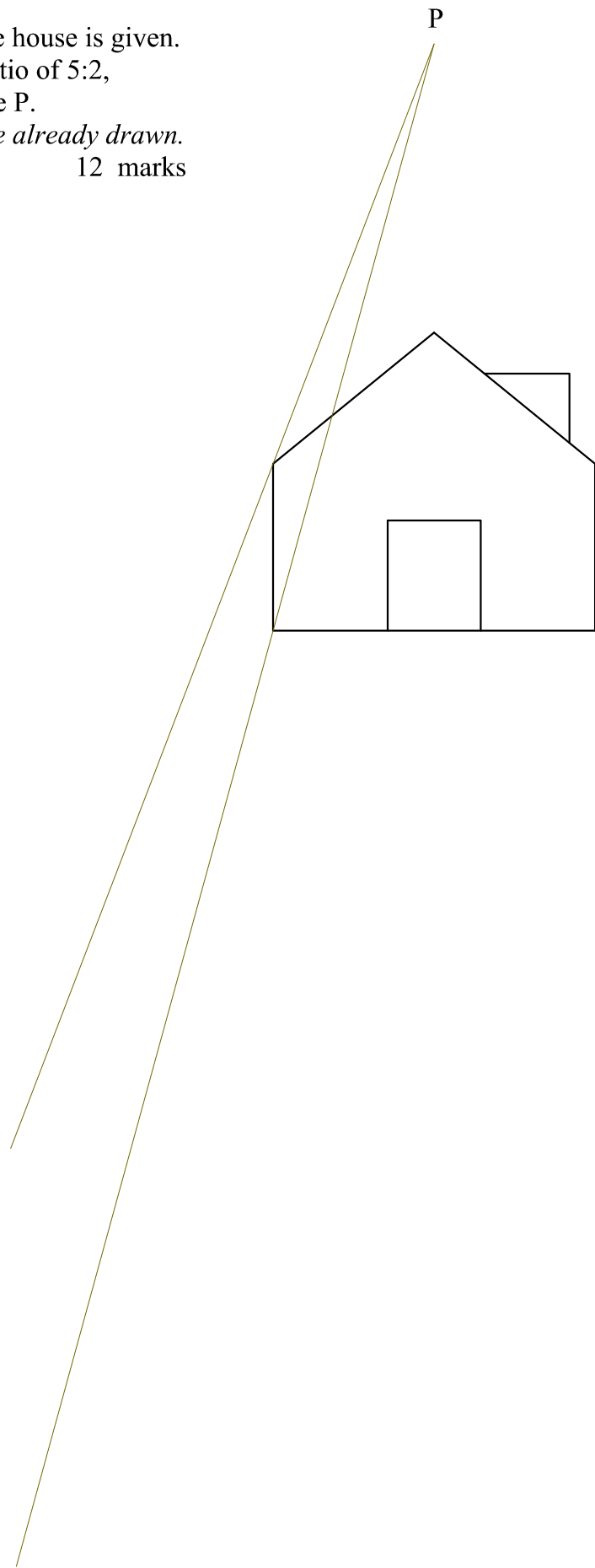
12 marks



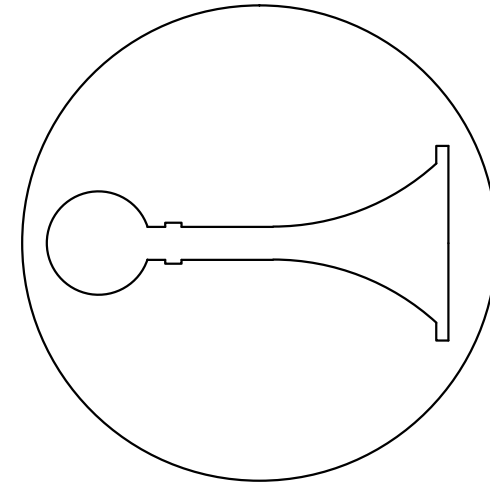
KEY	
	TRUCKS

SCALE: _____

4. The drawing of a simple house is given. Enlarge the drawing by a ratio of 5:2, taking radial lines from pole P.
Note: Some radial lines are already drawn.
 12 marks



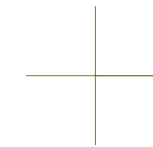
5. a) The drawing below shows a **mandatory** sign.
 i) Colour the sign with the appropriate colours.
 ii) Print down a title in the guidelines provided to explain the meaning of the sign.
 6 marks



b) A **prohibition sign** is needed at the main entrance of Valletta to inform people not to feed the pigeons.
 i) In the rectangle provided draw freehand sketches to develop the required sign.
 ii) Use your sketches to make a final drawing of the prohibition sign in the circle given, using drawing instruments where required.
 iii) Colour the sign using the appropriate colours for a prohibition sign.
 12 marks



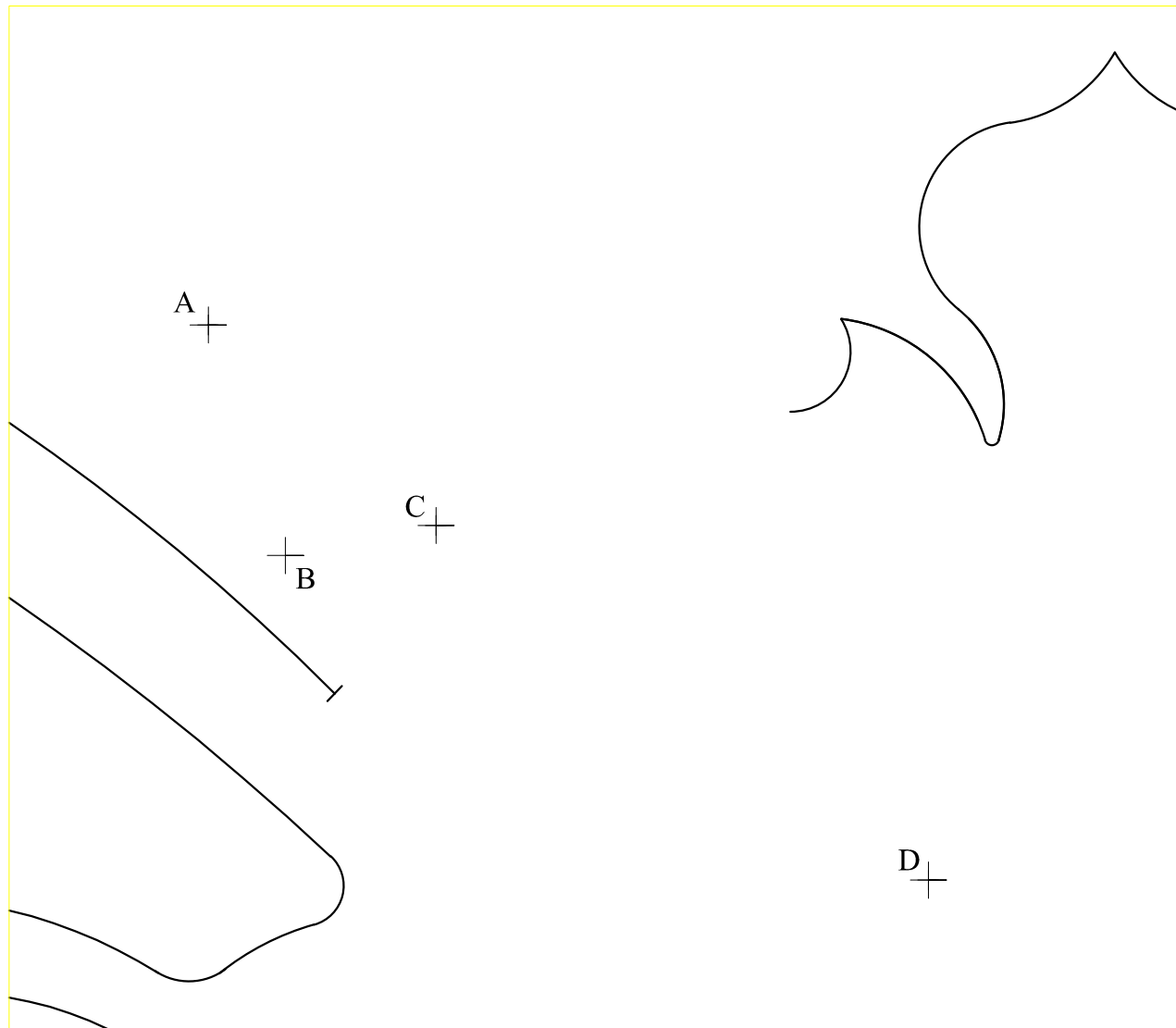
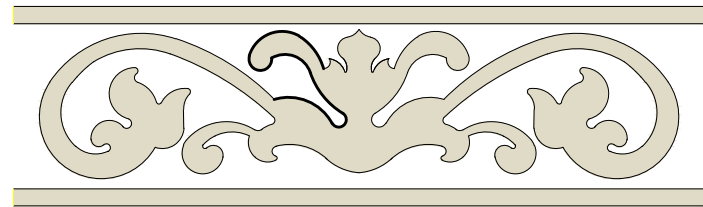
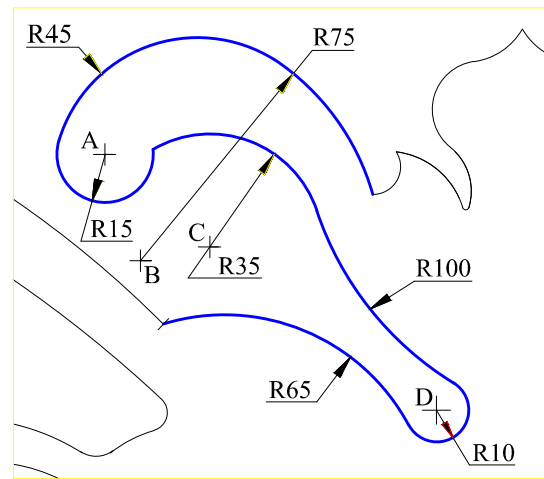
FREEHAND SKETCHES



PROHIBITION SIGN

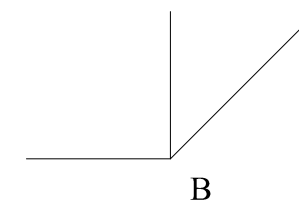
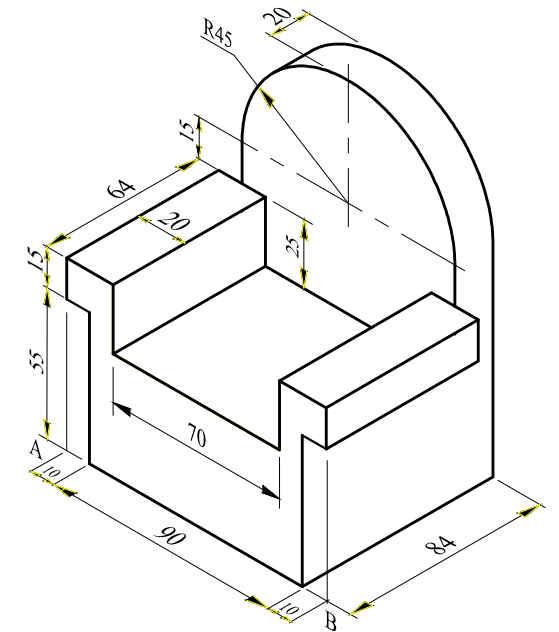
6. The design shown below is part of the marble floor of the Cathedral at Mdina. An enlarged dimensioned part of the design is also given at the side. Complete the missing part of a similar enlarged design given at the bottom to the given dimensions, showing the construction for obtaining the centre of the arcs. Show three points of tangency. *Note: It is advisable to start by drawing the arcs with centres A, B, C and D.*

14 marks



7. An isometric projection of an arm-chair is drawn. On the start-lines shown below and using the given dimensions, draw a cabinet oblique projection of the arm-chair putting AB on the forefront.

16 marks



Sheet 4 of 4