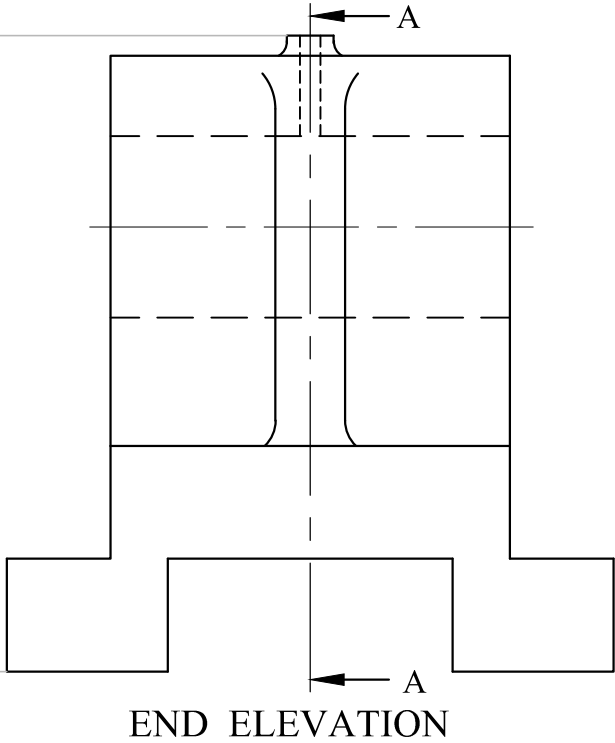
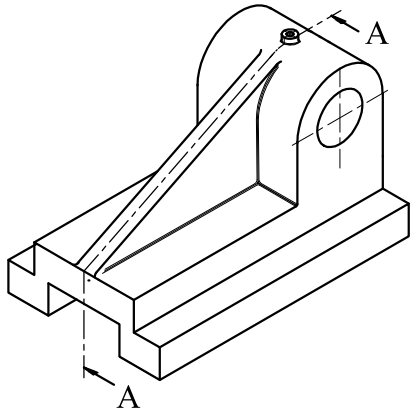
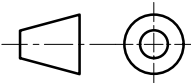
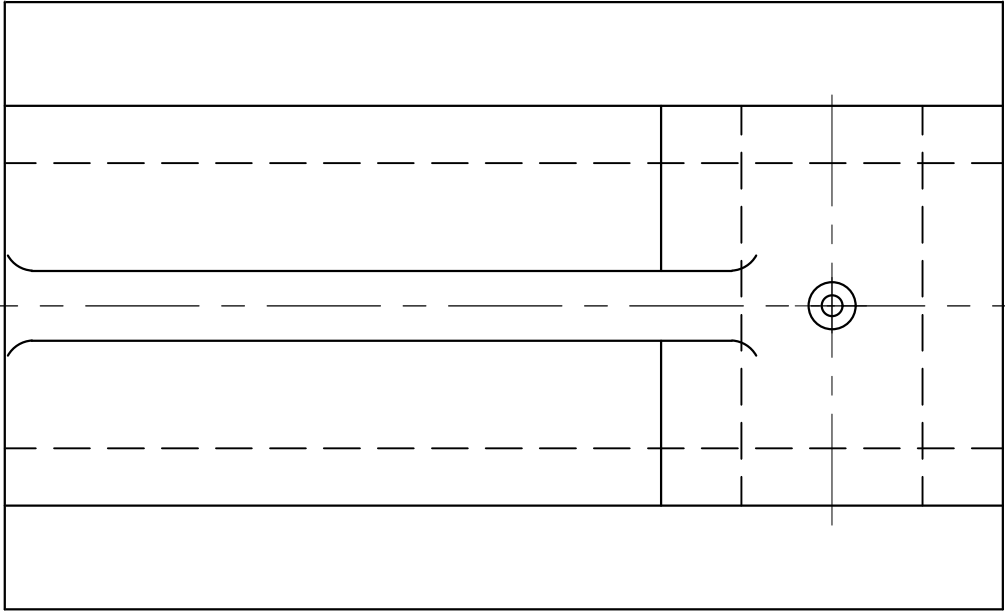


1. A pictorial view of a Bearing Bracket is shown on the right. Also given are the End Elevation and the Plan. Draw the Sectional Front Elevation A-A in the space provided. 12 marks

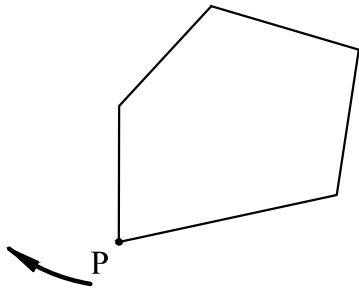
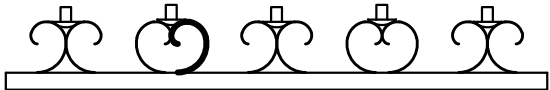


A - A

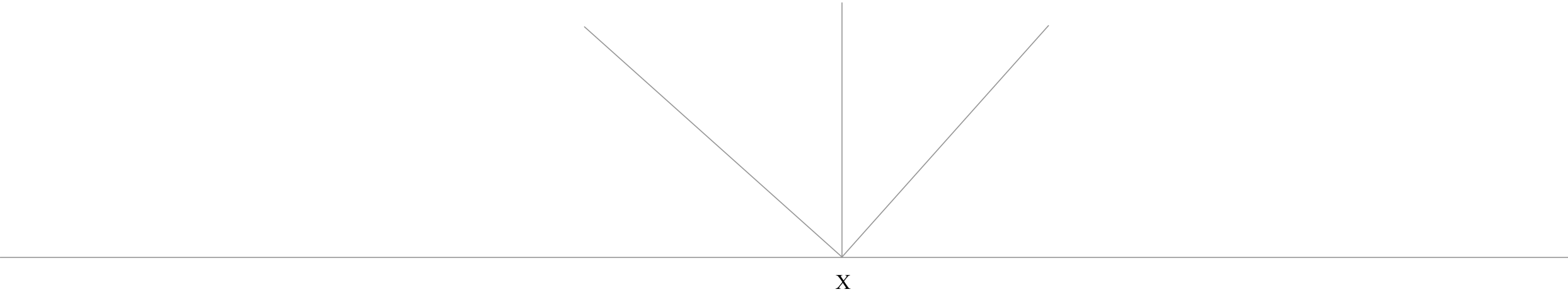
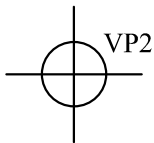
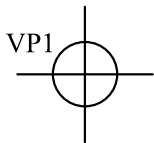
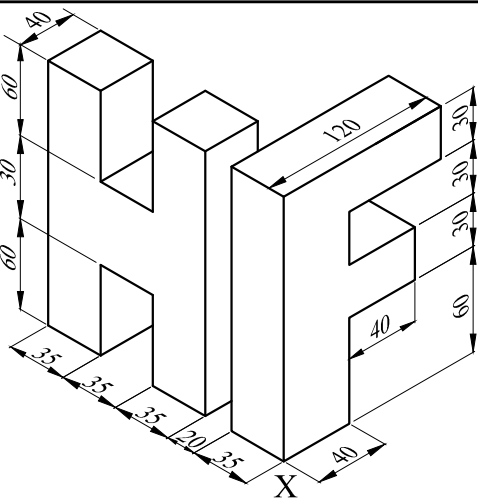


PLAN

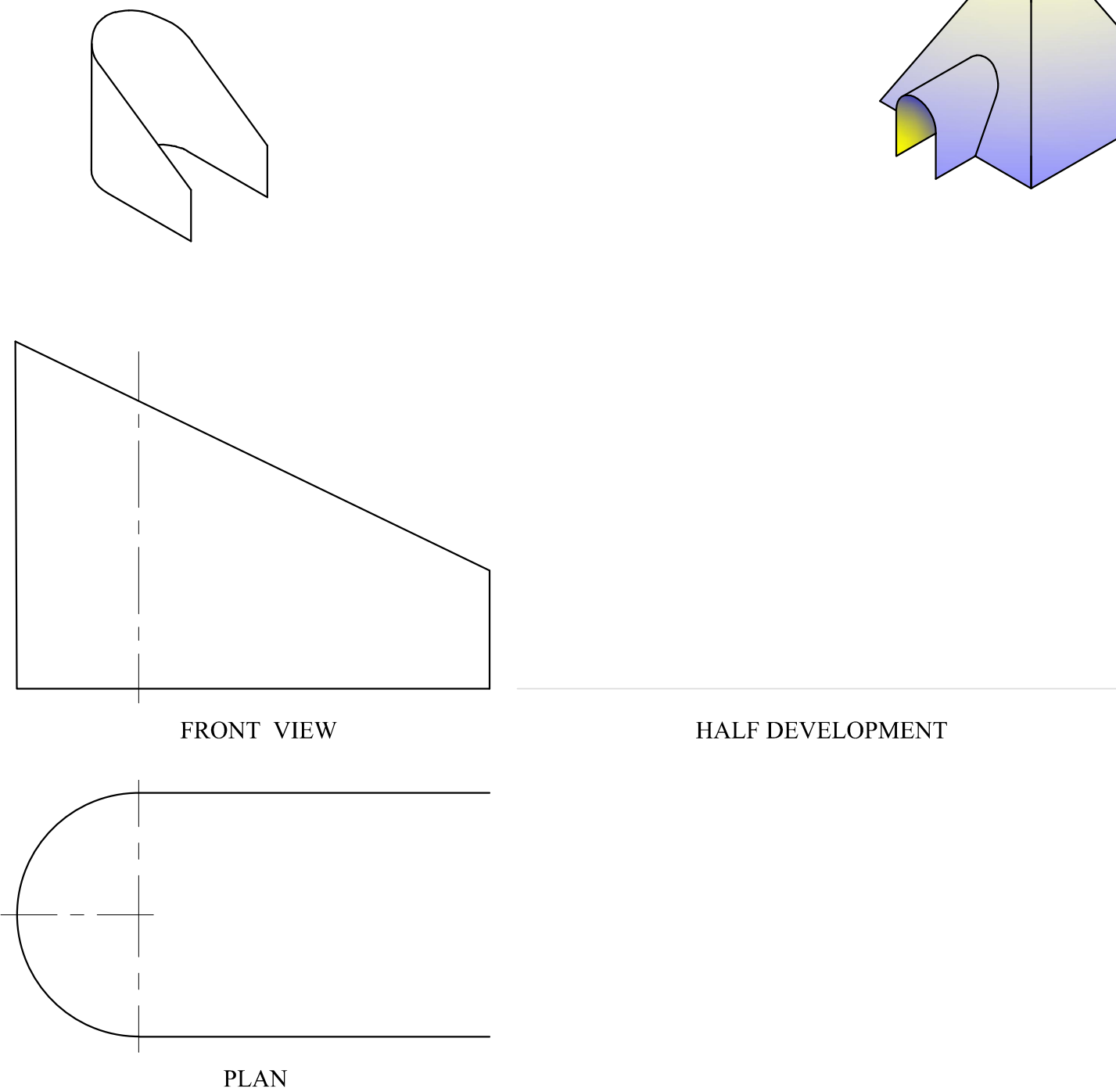
2. The drawing shows a set of five candle holders. All the curved parts are similar and have the shape of an Involute. Draw an enlarged version of the curved part highlighted in the drawing. Do this by constructing the Involute formed when plotting the locus of the end of a string as it unwinds completely from the given irregular pentagon. Start your involute from P in the direction of the arrow. 12 marks



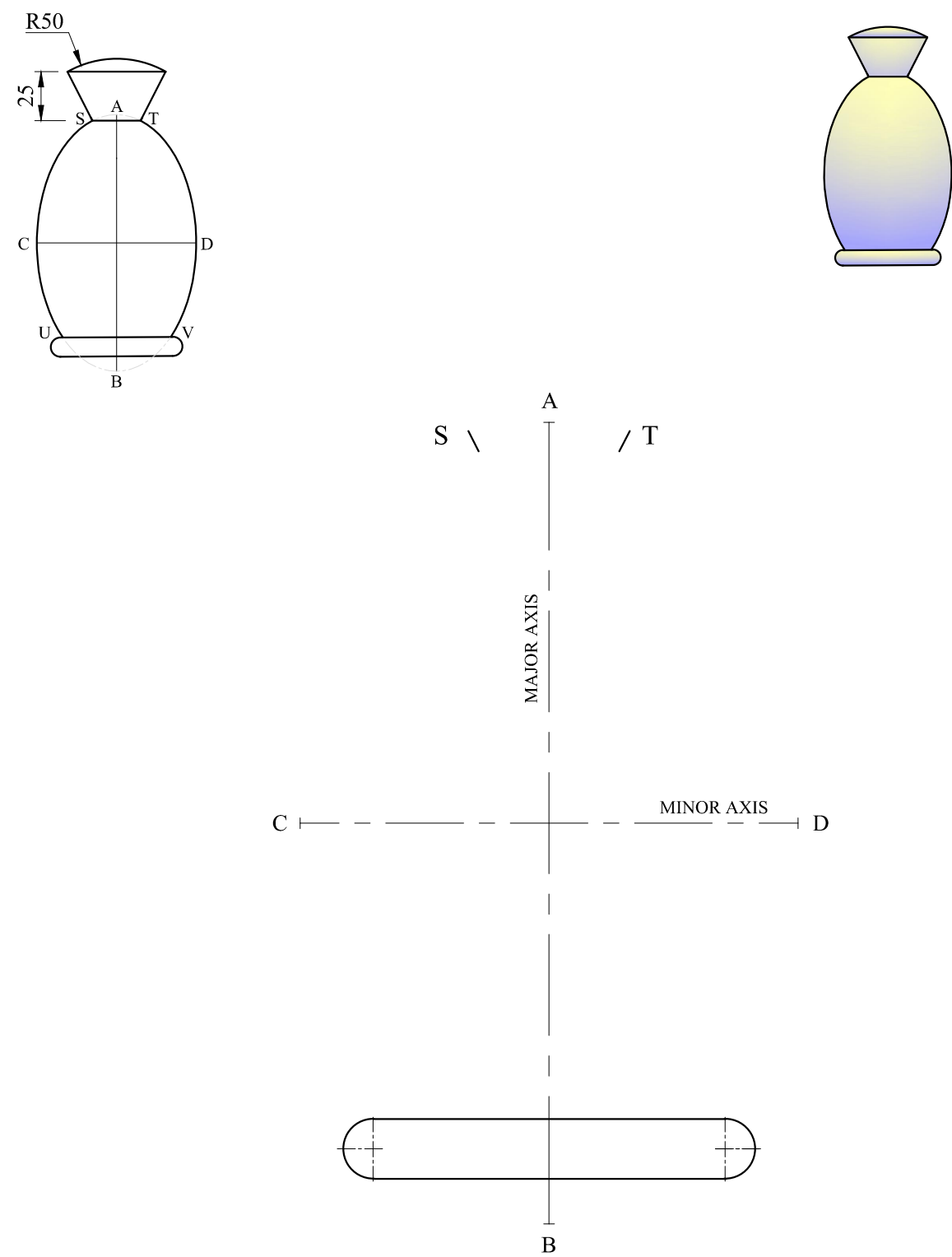
5. The logo shown on the right belongs to a shop called Hili Furniture.
A dimensioned isometric projection of the logo is also given.
On the given start lines, draw a Two-Point Estimated Perspective Projection of the
logo to the given dimensions, assuming point X as the lowest point of the drawing.
18 marks



3. The semi-circular tunnel at the entrance of the tent shown on the right, is to be covered by a thin aluminium sheet.
A pictorial view, a Front View and a Plan of the tunnel, which has been turned for drawing purposes, is given below.
Using the given start line as the base, draw half of the development of the tunnel.
12 marks

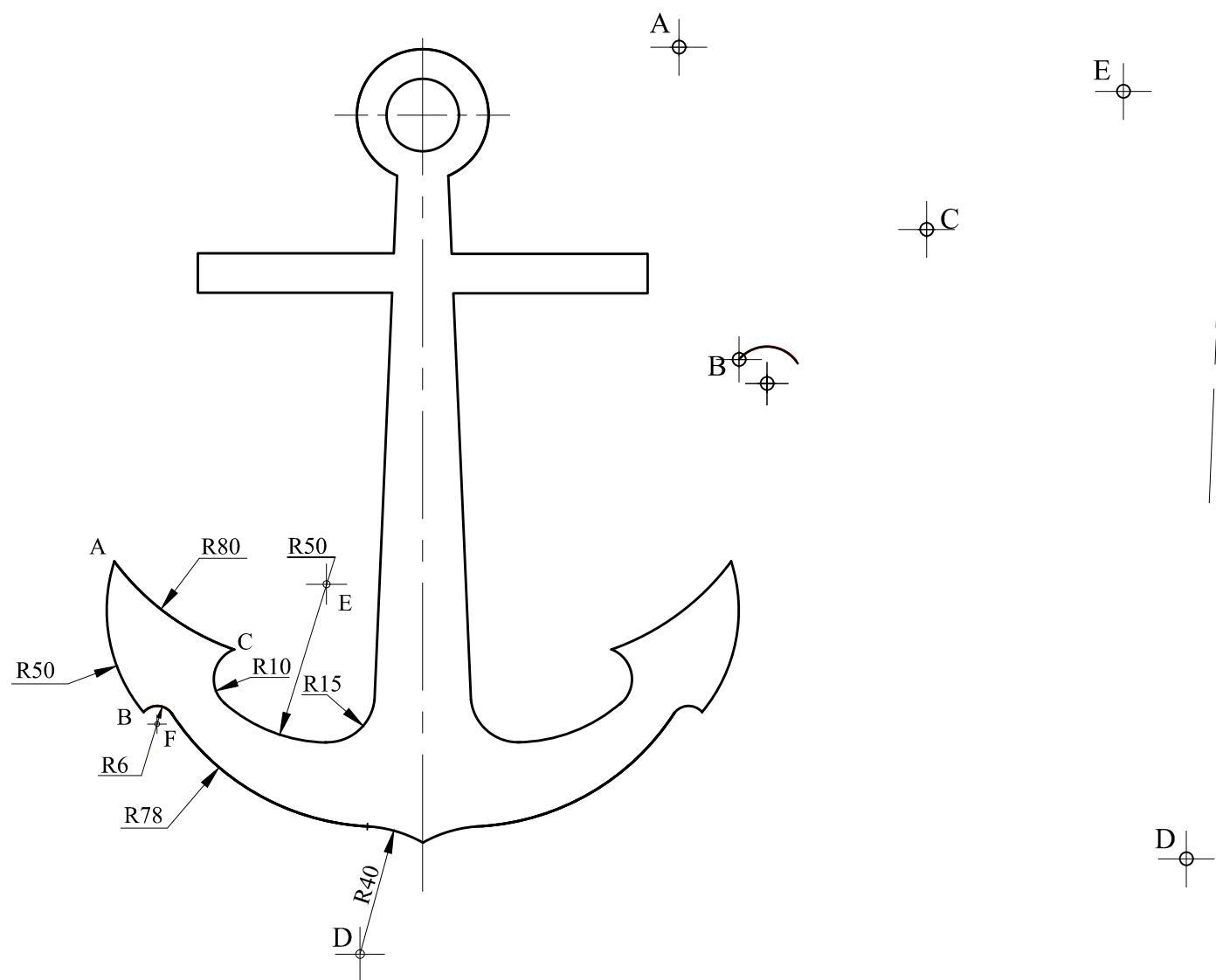


4. The profile of a bottle consists mainly of a part ellipse UCSTDV and two normals at S and T.
On the given major and minor axes and to the given dimensions:
a) Construct the part ellipse.
b) Locate geometrically the two Focal Points.
c) Construct a Normal at S, reflect the other Normal at T and complete the bottle cap.
14 marks



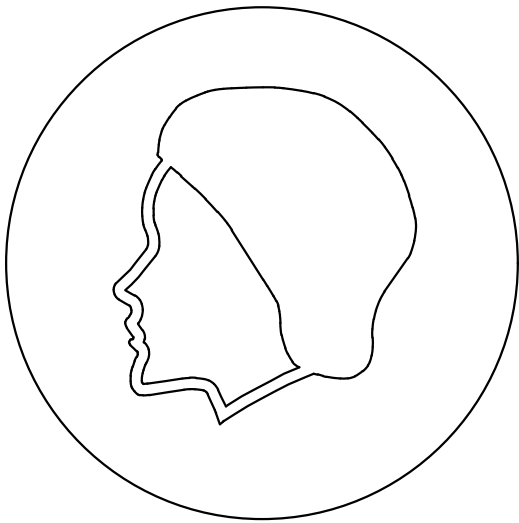
6. Details of the drawing of an anchor are given below.
Using the given start lines and to the given dimensions, complete the lower **left** part of the anchor, showing clearly the construction to obtain the centres of the arcs. Show points of tangencies.

18 marks



7a. A **mandatory sign** was placed at the entrance of an IT hardware equipment workshop. The management forbids persons with loose hair from entering the shop. The mandatory sign emphasises the use of hair caps. Colour the sign with the appropriate colours.

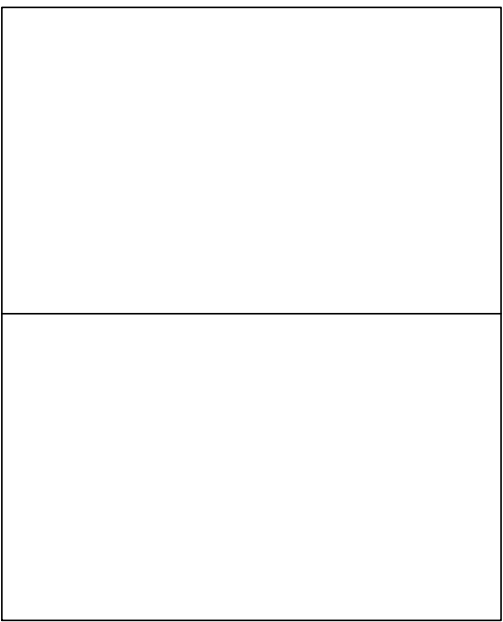
3 marks



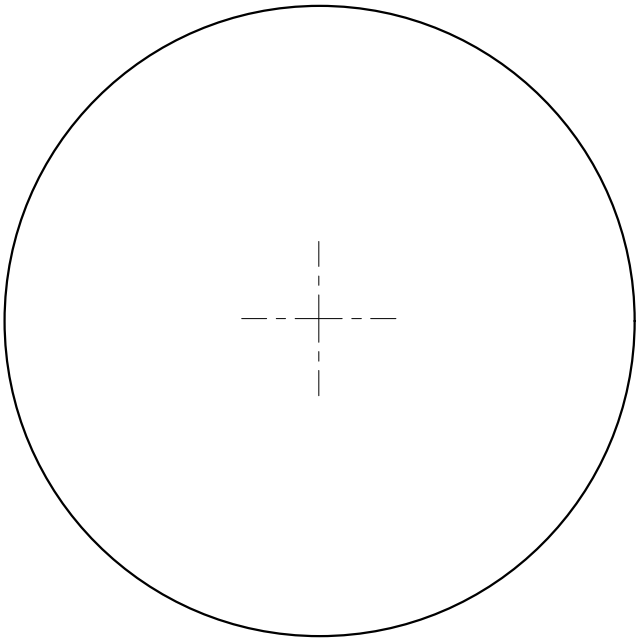
MANDATORY SIGN (Wear hair cover)

7b. Draw a **prohibition sign** informing persons not to step on the flowers while walking in a garden. Start by drawing two preliminary sketches in the rectangles provided. Use your sketches to make a final drawing of the prohibition sign in the circle provided, using drawing instruments where required. Colour your drawing with the standard colours of a prohibition sign.

11 marks



FREEHAND SKETCHES



PROHIBITION SIGN