

QUESTION 2: INTERPENETRATION AND DEVELOPMENT

Given:

- The incomplete front view and the top view of a regular square prism that has been shaped to fit around a right regular hexagonal prism.
- Both the prisms are solid and can be considered as a casting.
- The axes of both prisms lie in a common vertical plane.
- The auxiliary view of the square prism.
- The position of point O on the drawing sheet.

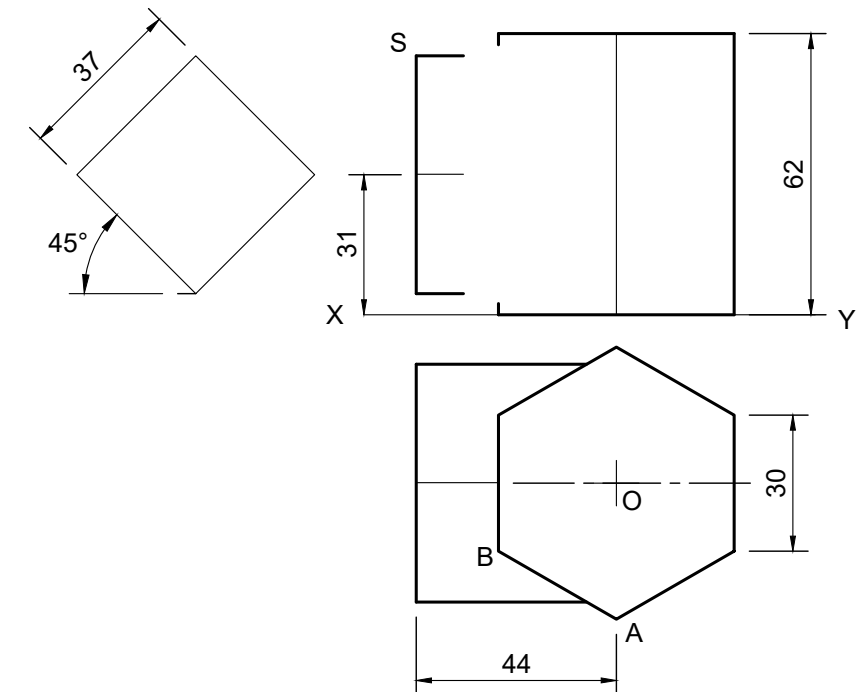
Instructions:

Draw to scale 1 : 1, the following views of the two prisms:

- 2.1 The given top view
- 2.2 The complete front view, clearly showing the curve of interpenetration
- 2.3 The left view
- 2.4 Develop the surface of the hexagonal prism. Show the points of interpenetration of the square prism clearly. Use point A to B as the start position.
- 2.5 Develop the surface of the square prism. Use point S as the start position.

Show all hidden detail and fold lines.

[48]



ASSESSMENT CRITERIA				
1	TOP VIEW	5.5		
2	FRONT VIEW	7.5		
3	LEFT VIEW	7		
4	DEVELOPMENT HEXAGON	15		
5	DEVELOPMENT SQUARE	13		
PENALTIES (-)				
TOTAL		48		

A

O

S



INTERPENETRATION & DEVELOPMENTS	ESTIMATED TIME FOR COMPLETION	30 MIN	GRADE 11	NAME & SURNAME		TASK 8.1	PAGE 31
	YOUR TIME OF COMPLETION	MIN					