



**QUESTION 2: INTERPENETRATION AND DEVELOPMENT**

**Given:**

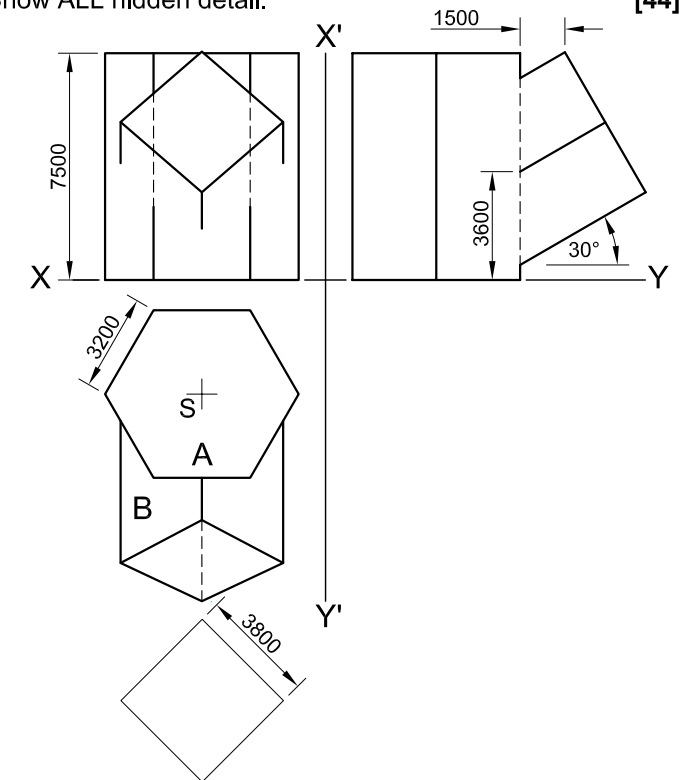
The incomplete front view, top view and the incomplete left view of an anchor used to secure an arch over a stadium. The anchor is a concrete casting in the form of a hexagonal prismatic footing (A) and a square branch piece (B), that has been shaped to fit around the footing. The axes of both pieces lie in a common vertical plane. The branch piece will be clad with stainless steel.

**Instructions:**

- 2.1 Draw, to scale 1:100 and in first-angle orthographic projection, the following views of the complete anchor clearly showing the curve of interpenetration that will be formed between the two pieces:
  - 2.1.1 The top view using point S as a reference
  - 2.1.2 The complete front view
  - 2.1.3 The complete left view
- 2.2 Develop the surface of the stainless steel cladding that will cover the branch piece B. Label the development.

- Show ALL necessary constructions.
- Show ALL hidden detail.

[44]



S+

ASSESSMENT CRITERIA			
TOP VIEW & CONSTRUCTION	6½		
FRONT VIEW	17		
LEFT VIEW	10		
DEVELOPMENT	10½		
<b>TOTAL</b>	<b>44</b>		
EXAMINATION NUMBER			
EXAMINATION NUMBER			3

