QUESTION 2: CAM

Given:
- Start position T for the displacement graph showing uniform movement.

Motion:
- The follower start at its maximum displacement point which is vertical 75 mm above the start position T.
- The follower descent for the first 30° for 25 mm.
- The follower rest for the next 60°.
- The follower descend for 15 mm over the next 30°.
- There is a dwell period for 90°.
- The follower descend for 35 mm over the next 30°.
- For the following 30° the follower rest.
- The follower rises to its maximum original position for the rest of the rotation.

Instructions:
- Draw, to a horizontal scale of 30° = 11 mm and a vertical displacement scale of 1 : 1, the complete displacement graph for the required motions.
- Label the graph and indicate the different scales. **[12]**

ASSESSMENT CRITERIA				
1	CONSTRUCTION	3		
2	POINTS + CURVES	7.5		
3	LABELS	1.5		
SUBTOTAL		12		

QUESTION 2: CAM

Given:
- Start position Q for a displacement graph.

Motion:
The cam rotates at constant velocity imparting the following uniform motion to a follower:
- The follower rises for 18 mm over the first 45°
- The follower rises 10 mm further for the next 90°
- The follower rises with 25 mm for 45°.
- There is a dwell period for 90°.
- The follower rises to its maximum height of 70 mm within the next 45°.
- The follower move to its original height position for the rest of the rotation.

Instructions:
- Draw, to a horizontal scale of 150 mm = 360° and a displacement scale of 1 : 1, the complete displacement graph for the required motions.
- Label the graph and indicate the different scales. **[11]**

ASSESSMENT CRITERIA				
1	CONSTRUCTION	3		
2	POINTS + CURVES	6.5		
3	LABELS	1.5		
SUBTOTAL		11		
TOTAL		**23**		

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CAM	ESTIMATED TIME FOR COMPLETION	20 MIN	GRADE 11	NAME & SURNAME		TASK 11.2	PAGE 49
	YOUR TIME OF COMPLETION	MIN					