

QUESTION 2: CAM

Given:

- The detail of a wedge follower.
- The starting point A of the displacement graph.

Specifications:

- The maximum movement of the follower is 60mm.
- The minimum distance from the cam profile to the centre of the camshaft = 18mm.
- Camshaft = Ø20
- Rotation = anticlockwise.

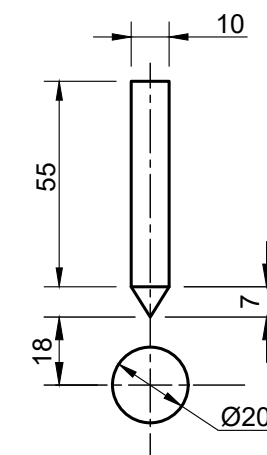
Movement:

- The follower rises 20mm for the first 90°.
- It then dwells for 60°.
- The follower rises to the maximum.
- For the next 60° the follower falls 15mm and then returns to its original position.

Instructions:

- Draw to scale 1:1 the given follower and camshaft.
- Draw, to a horizontal scale of 8mm = 30° and a vertical displacement scale of 1:1 the complete displacement graph for the uniform motions.
- Label the graph.
- Show the direction of rotation.
- Show all necessary construction and projection. [30]

A



ASSESSMENT CRITERIA				
1	GIVEN + MINIMUM DISTANCE + CENTRE LINES	5		
2	CONSTRUCTION DISPLACEMENT GRAPH	7		
3	GRAPH	5,5		
4	CAM CONSTRUCTION	5		
5	CAM & CURVE QUALITY	7,5		
PENALIZING (-)				
TOTAL		30		



CAM	ESTIMATED TIME FOR COMPLETION	35 MIN	GRADE 11	NAME & SURNAME		TASK	PAGE
	YOUR TIME OF COMPLETION	MIN				11.3	50