STAPEL

A

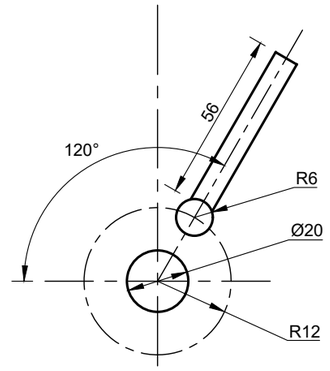
QUESTION 2: CAM

Given:
- The detail of a roller-ended follower and the camshaft.
- The starting position A of the displacement diagram.

Specifications:
- The minimum distance from the cam profile to the centre of the camshaft = 18mm.
- Camshaft = Ø20
- Rotation = clockwise.

Movement:
- The follower rises 25mm for the first 90°.
- Then it rises a further 45mm with a simple harmonic movement for the following 60°.
- The follower rests for 30°.
- It falls to its original position with a uniform acceleration and retardation.

Instructions:
- Draw to scale 1 : 1 the given follower and camshaft.
- Draw, to a horizontal scale of 8mm = 30° and a displacement scale of 1 : 1 the complete displacement diagram for the required motions.
- Label the graph and the scale.
- Show the direction of rotation on the cam profile.
- Show all necessary construction and projection. **[28]**



ASSESSMENT CRITERIA				
1	DISPLACEMENT DIAGRAM	14		
2	CONSTRUCTION	3		
3	CAM PROFILE	8		
4	CAM FOLLOWER	3		
TOTAL		28		

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CAM	ESTIMATED TIME FOR COMPLETION	35 MIN	GRADE 12	INITIALS & SURNAME		TASK 13.3	PAGE 48
	YOUR TIME FOR COMPLETION	MIN					