



QUESTION 2: MECHANISM (LOCI)

Given:

- A schematic drawing of a mechanism consisting of a crank OA, sliding rod AB, rod CD, horizontal groove FG and swivel guide E
- The position of the centre point O on the drawing sheet

Specifications:

- The position of centre point O, swivel guide E and groove FG are fixed
- Sliding rod AB is pin-jointed to crank OA at A
- Rod CD is pin-jointed to sliding rod AB at C
- CD is 100 mm in length

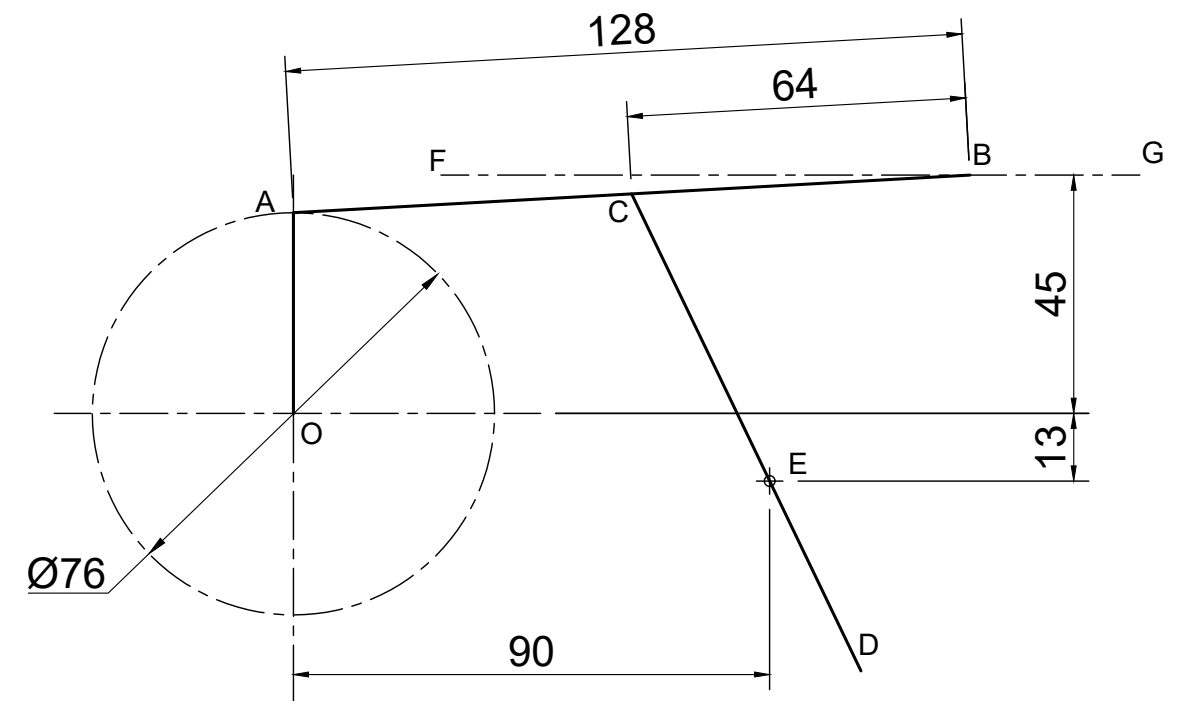
Motion:

As the crank OA rotates, point B, of sliding rod AB, reciprocates along groove FG and rod CD slides through swivel guide E.

Instructions:

- Draw, to scale 1 : 1, the given schematic drawing of the mechanism.
- Trace the locus generated by point C and point D for one complete rotation of the crank OA.
- Show all necessary constructions. [25]

+
O



ASSESSMENT CRITERIA			
1	GIVEN	6	
2	CONSTRUCTION	5	
3	LOCUS + CURVE	14	
TOTAL		25	



MECHANISM (LOCI)	ESTIMATED TIME FOR COMPLETION	20 MIN	GRADE 12	INITIALS & SURNAME		TASK	PAGE
	YOUR TIME FOR COMPLETION	MIN				14.2	51