



education

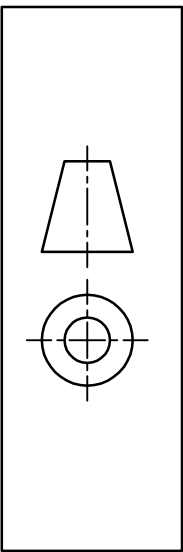
**Department:
Education
KwaZulu - Natal**

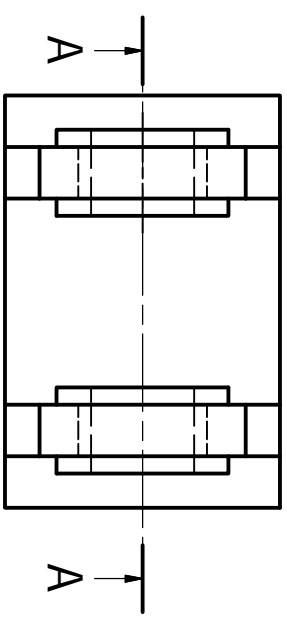
GRADE 12

MARKING MEMO

**ENGINEERING GRAPHICS AND DESIGN P2
TRIAL EXAMINATION 2012**

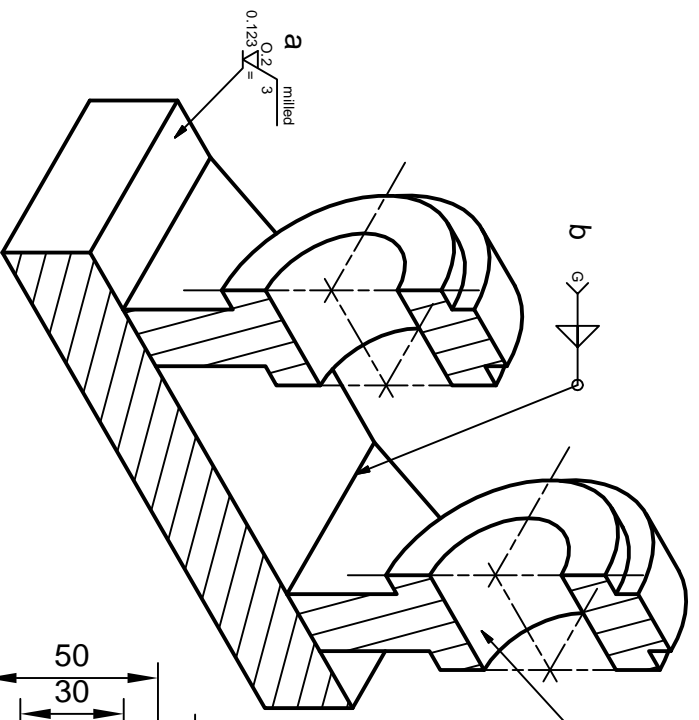
QUESTION ONE : MECHANICAL ANALYTICAL
 Given : The working drawing of a Pipe Support, shown in first angle orthographic projection, with a title block and a table of questions.
 Instructions : Complete the table below by neatly printing the answers to the questions, which all refer to the accompanying drawings and title block.

NO.	QUESTIONS	ANSWERS	MARKS
1	On what date was the drawing checked?	8/6/2012	1
2	Who approved the drawing?	Fareed	1
3	What is the title of the drawing?	Pipe Support	1
4	What is the drawing number?	19 / 1259	1
5	From what material is the pipe support made?	Galvanised mild steel	1
6	What scale is indicated for the drawing?	1 : 2	1
7	What was the date of the first revision?	12/5/2012	1
8	What was the reason for the last revision?	welding details	1
9	What would view 1 be called?	Sectioned Front View on A-A	1
10	What would view 2 be called?	Top View	1
11	Determine the dimension at w.	25mm	1
12	Calculate the dimension at x.	40mm	1
13	What is the dimension at y?	15mm	1
14	Explain in detail all the information found in the symbol next to a.	finished by milling to a roughness value of 0.2 milled parallel with an allowance of 0.123 roughness over a sample length of 3.	4
15	Letter b is a welding symbol. What is the correct representation of this symbol?	Gas weld on both sides on site	4
16	What does the symbol at c indicate?	No machining	1
17	Draw the projection symbol used in this drawing.		3
TOTAL			25



VIEW 2

VIEW 1



DRAWING SYSTEM	Autocad			
DRAWING NUMBER	19/1259			
FILE NAME	RHG 53/12			
DRAWN BY	Vishnu	20/04/12		
CHECKED BY	Harry	08/06/12		
APPROVED BY	Fareed	12/08/12		
25/07/12		Anand	Welding details	02
12/05/12		Fahim	Diameter of holes	01
DATE	CHANGE BY	REVISION DESCRIPTION	NO.	

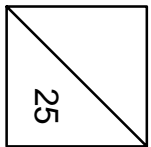
COASTAL STEEL MANUFACTURING
 P.O.Box 786 JACOBS 4052
 www.csm@gmail.com
 Tel. 031 4657826 Fax. 031 4659220

PIPE SUPPORT
 Galvanised Mild Steel

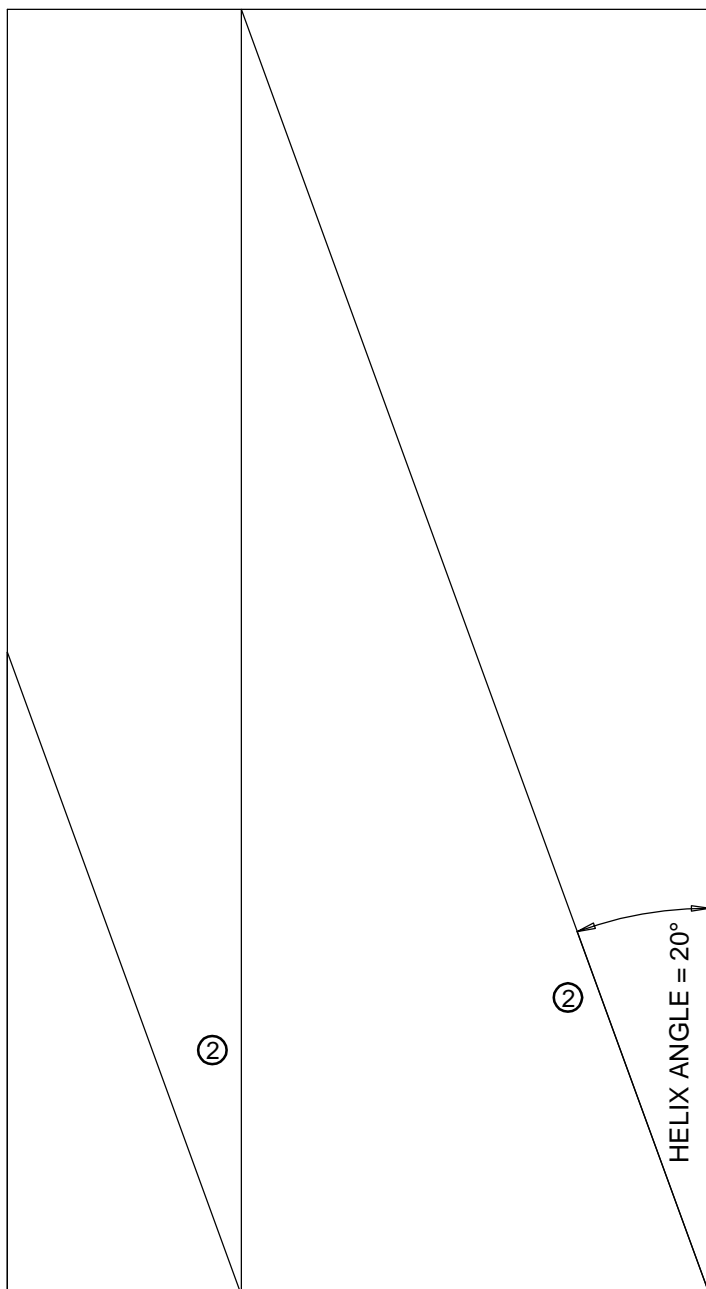
SCALE 1:2
 TOLERANCE : 0.05

NAME

ANSWER QUESTION 17 IN THIS BLOCK

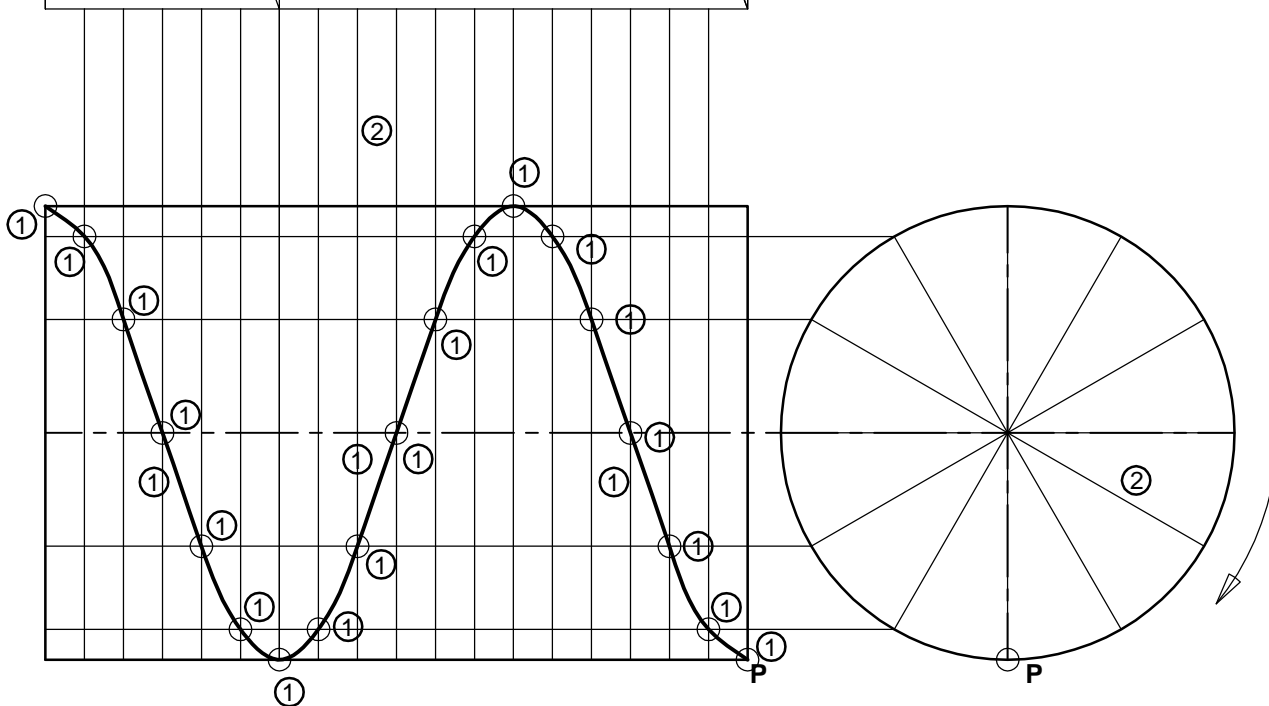


QUESTION 2.1

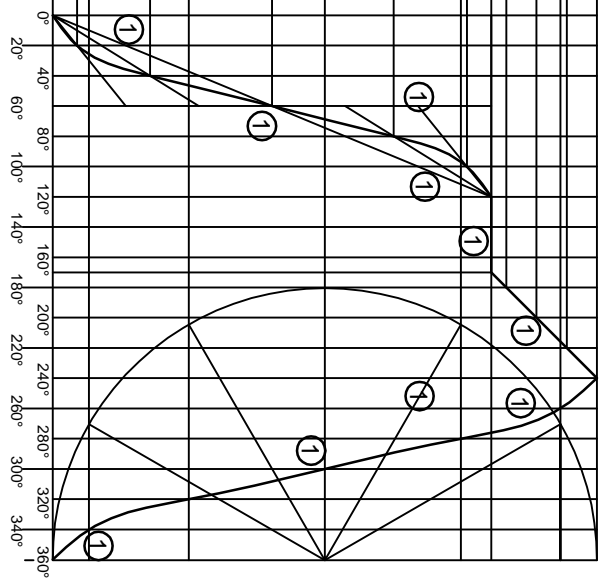
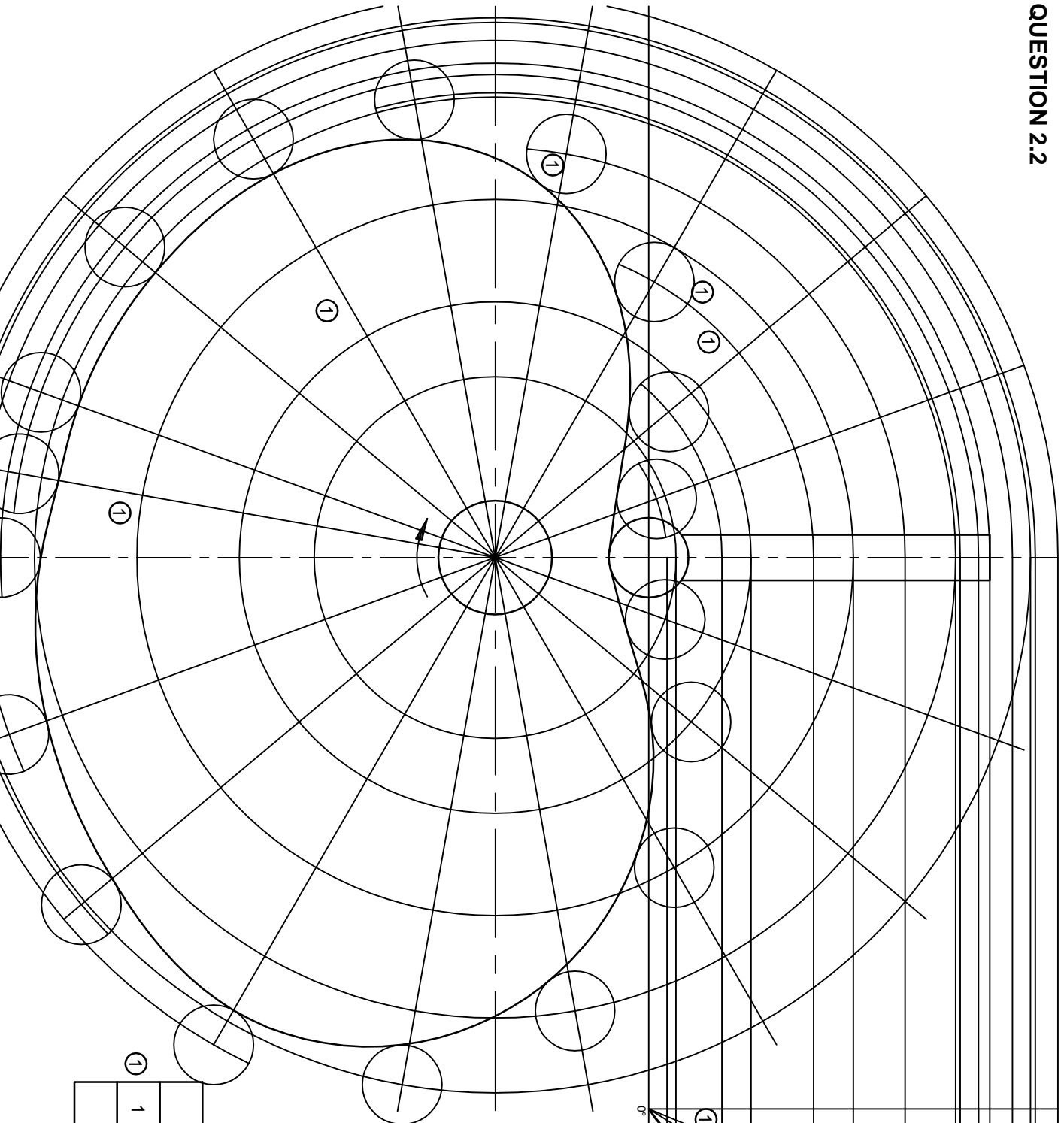


QUESTION 2.1

MARKING CRITERIA		MARK	
①	1 POINTS ($\frac{22}{2}$)		11
②	2 CALC/CONSTRUCTION		4
TOTAL			15



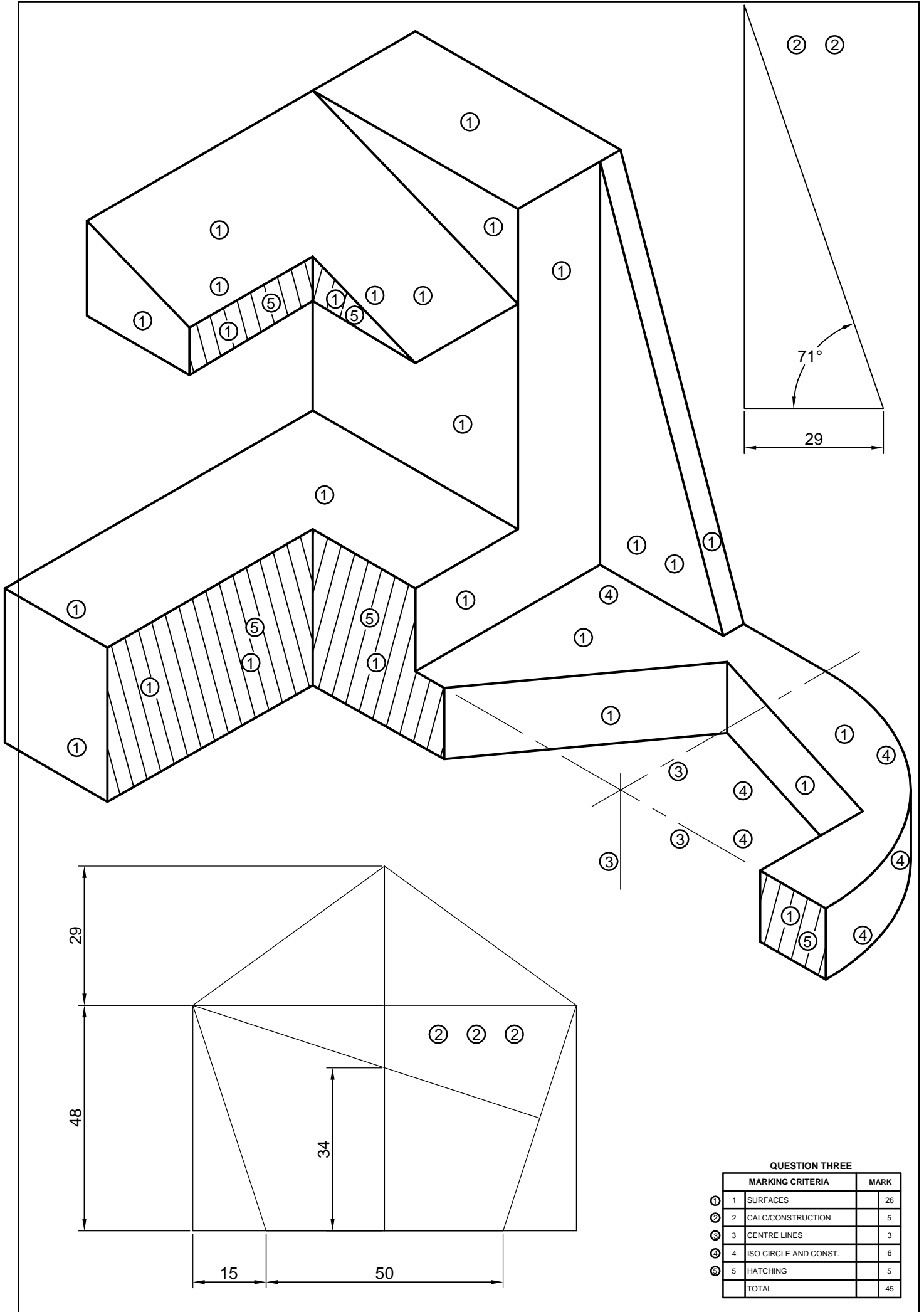
QUESTION 2.2



GRAPH OF DISPLACEMENT
SCALE : 4mm=20° ROTATION

QUESTION 2.2

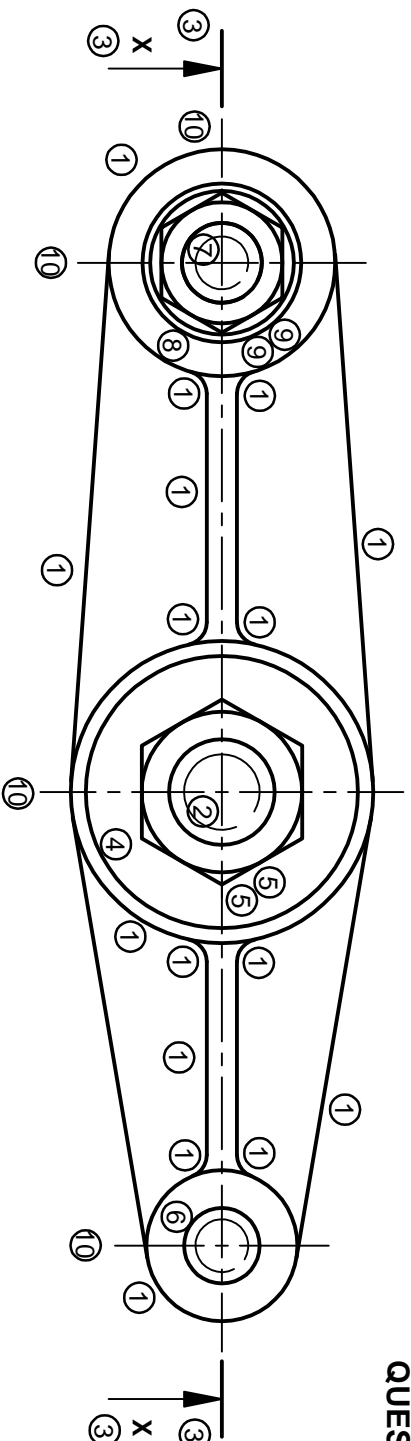
MARKING CRITERIA		MARK
1	CONSTRUCTION	15
1	TOTAL	15



QUESTION THREE

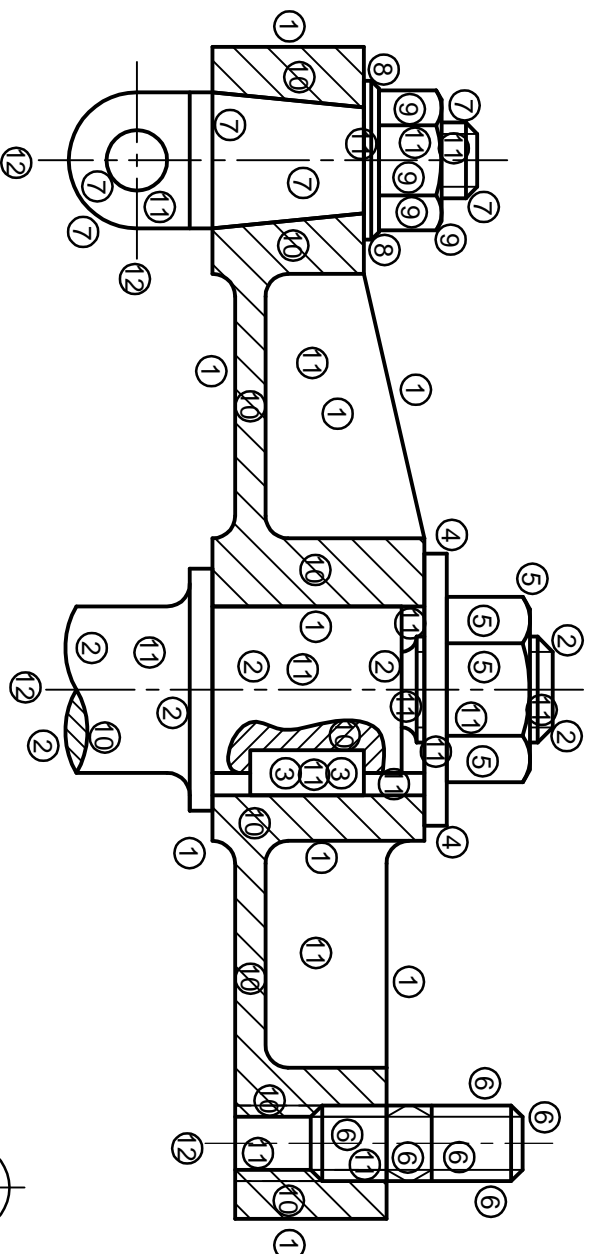
MARKING CRITERIA		MARK
①	1 SURFACES	26
②	2 CALC/CONSTRUCTION	5
③	3 CENTRE LINES	3
④	4 ISO CIRCLE AND CONST.	6
⑤	5 HATCHING	5
	TOTAL	45

QUESTION FOUR - MECHANICAL ASSEMBLY



4.2 TOP VIEW

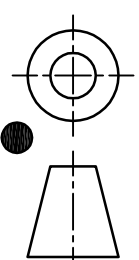
ITEM	NAME	QTY
1	LEVER & FILETS ($\frac{1}{2}$)	8
2	SPINDLE	1
3	CUTTING PLANE ($\frac{1}{2}$)	2
4	WASHER	1
5	M14 NUT	2
6	STUD	1
7	TAPERED PIN WITH LUG HEAD	1
8	45° CHAMFERED WASHER	1
9	M10 NUT	2
10	CENTRE LINES	4
	SUB-TOTAL	23
4.3	TITLES; SCALE; SYMBOL	4



4.1 SECTIONED FRONT VIEW

ITEM	NAME	MARK
1	LEVER	9
2	SPINDLE	7
3	SQUARE KEY	2
4	WASHER	2
5	M14 NUT	4
6	STUD	6
7	TAPERED PIN	6
8	45° CHAMFERED WASHER	2
9	M10 NUT	4
10	HATCHING	10
11	NO HATCHING	17
12	CENTRE LINES	4
	SUB-TOTAL	73
	TOTAL	100

SECTIONED FRONT VIEW ON X-X



ROTARY LEVER SUB - ASSEMBLY

SCALE 1:1