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EASTERN CAPE EDUCATION DEPARTMENT
OOS-KAAP ONDERWYSDEPARTEMENT**

NATIONAL SENIOR CERTIFICATE

GRADE 11

ENGINEERING GRAPHICS AND DESIGN P2

NOVEMBER 2020

**FINAL EXAMINATION
MARKING GUIDELINE**

MARKS: 200

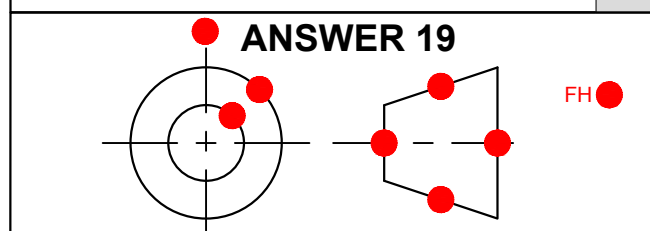
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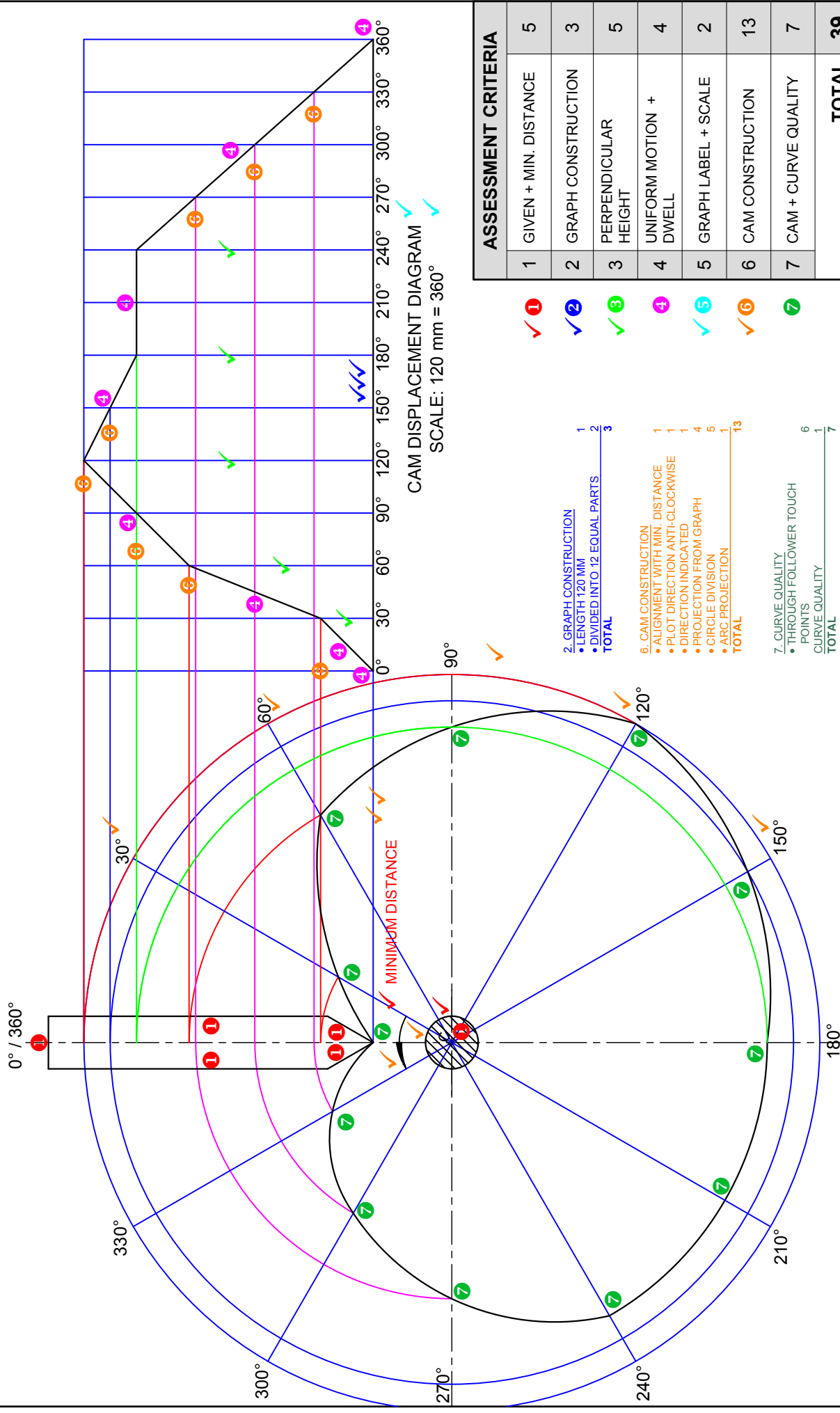
This marking guideline consists of 6 pages.

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QUESTION 1: ANALYTICAL (MECHANICAL)

ANSWERS		
1	BUFFALO	1
2	LUSIKISIKI	1
3	DOEEC-20	1
4	lak78.dwg	1
5	XONGO	1
6	TONA	1
7	3 DAYS	2
8	CHROMIUM-VANADIUM	1
9	NONE	1
10	5 000	1
11	RINGHEAD	1
12	PNEUMATIC GUN	1
13	4	2
14	PART SECTION	1
15	TOP VIEW	1
16	FULL SECTION RIGHT VIEW	2
16	FULL SECTION FRONT VIEW	2
18	6 (10 - R6 + 2)	2
	R1	2
	R5	1
	$50 + 22 + 13 + 12 = 97$	2
19		4
TOTAL		32





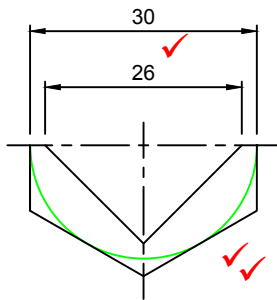
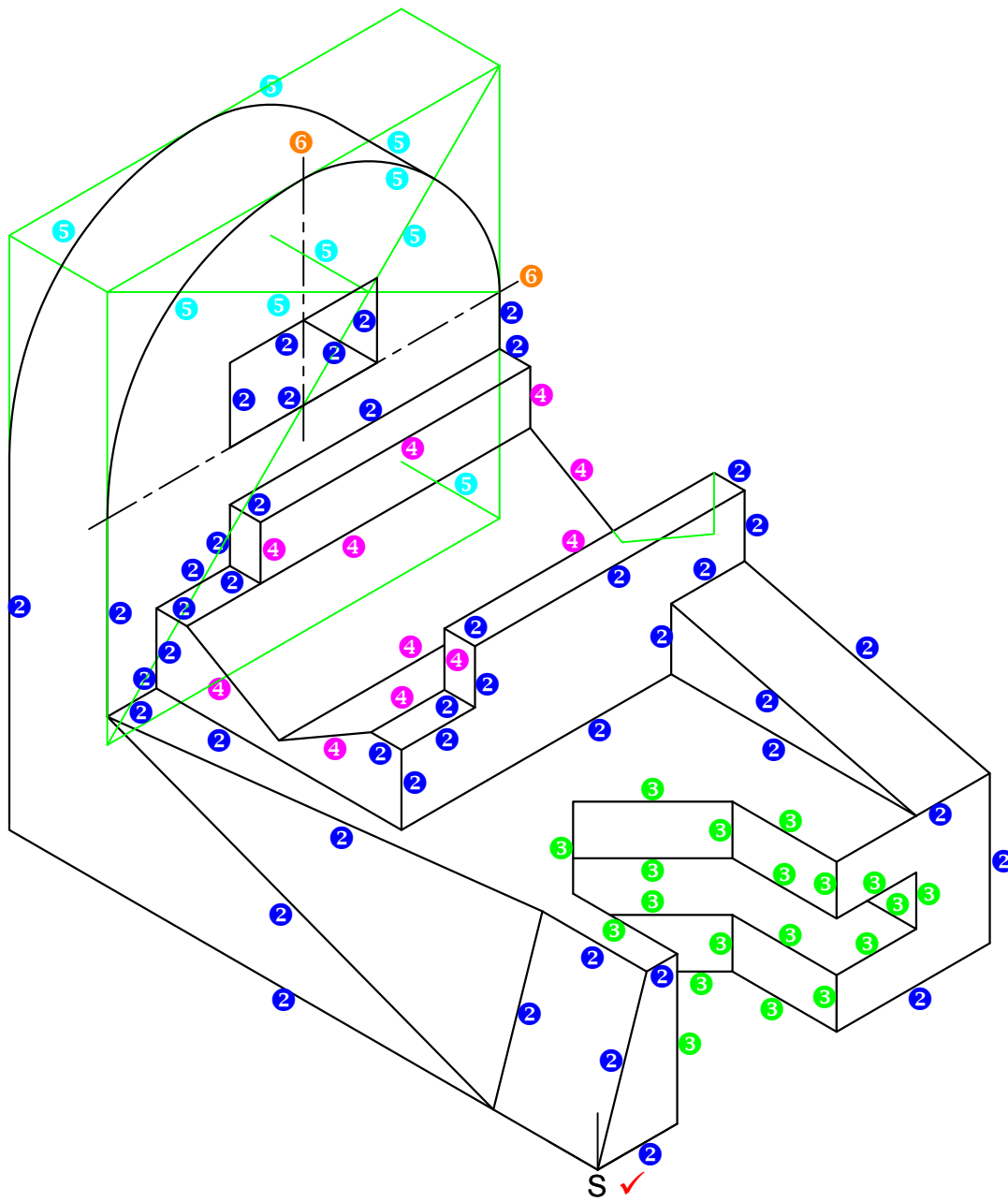
ASSESSMENT CRITERIA	
1	GIVEN + MIN. DISTANCE
2	GRAPH CONSTRUCTION
3	PERPENDICULAR HEIGHT
4	UNIFORM MOTION + DWELL
5	GRAPH LABEL + SCALE
6	CAM CONSTRUCTION
7	CAM + CURVE QUALITY
TOTAL 39	

- 1 ✓
 - 2 ✓
 - 3 ✓
 - 4 ✓
 - 5 ✓
 - 6 ✓
 - 7 ✓
2. GRAPH CONSTRUCTION
- LENGTH 120 MM 1
 - DIVIDED INTO 12 EQUAL PARTS 2
 - TOTAL 3**
6. CAM CONSTRUCTION
- ALIGNMENT WITH MIN. DISTANCE 1
 - PLOT DIRECTION ANTI-CLOCKWISE 1
 - DIRECTION INDICATED 1
 - PROJECTION FROM GRAPH 4
 - CIRCLE DIVISION 5
 - ARC PROJECTION 1
 - TOTAL 13**
7. CURVE QUALITY
- THROUGH FOLLOWER TOUCH POINTS 6
 - CURVE QUALITY 1
 - TOTAL 7**

QUESTION 2: CAM

3

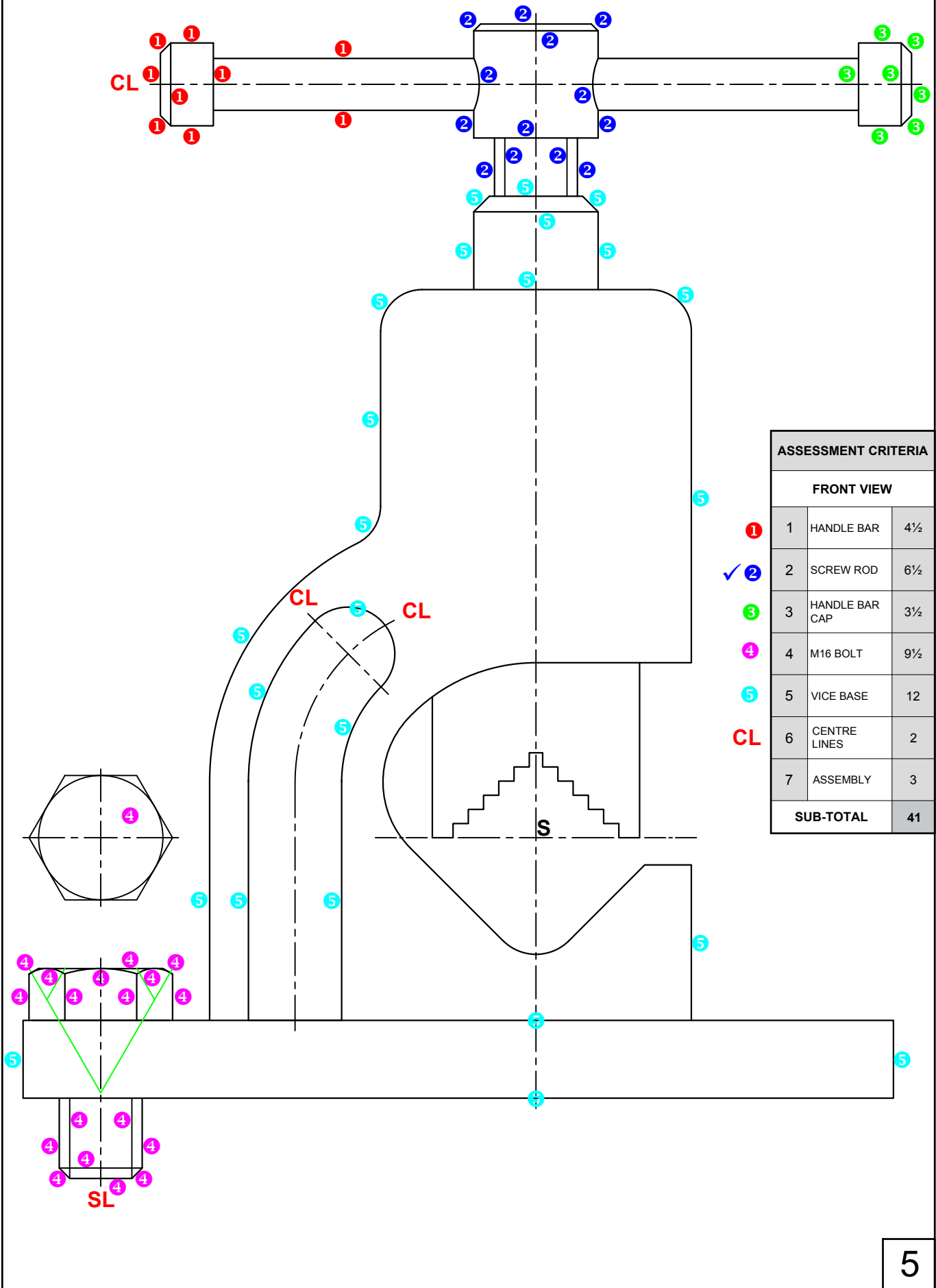
QUESTION 3: ISOMETRIC



ASSESSMENT CRITERIA		
✓ 1	AUX' VIEW + PLACING	4
2	ISOMETRIC LINES	22½
3	SQUARE + SLOT	9½
4	HEXAGON	5½
5	CIRCLE + CIRCLE CONST.	4½
6	CENTRE LINES	2
TOTAL		48

4

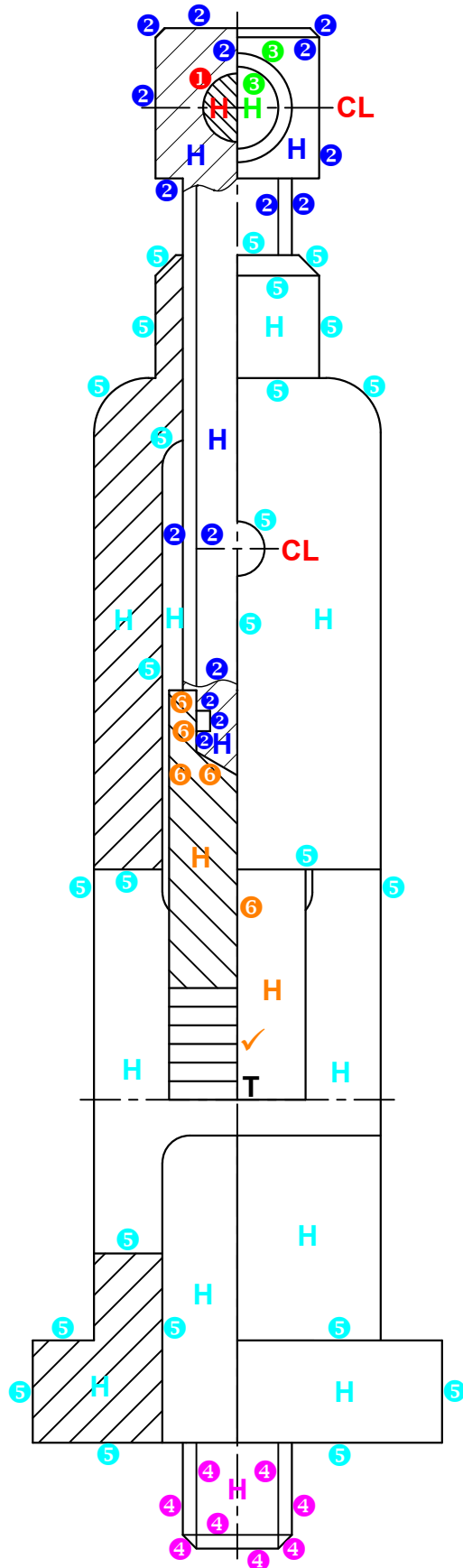
QUESTION 4: MECHANICAL ASSEMBLY



ASSESSMENT CRITERIA		
FRONT VIEW		
1	HANDLE BAR	4½
✓ 2	SCREW ROD	6½
3	HANDLE BAR CAP	3½
4	M16 BOLT	9½
5	VICE BASE	12
CL	CENTRE LINES	2
7	ASSEMBLY	3
SUB-TOTAL		41

5

QUESTION 4: MECHANICAL ASSEMBLY



- ① H
- ② H
- ③ H
- ④ H
- ⑤ H
- ✓⑥ H
- CL

ASSESSMENT CRITERIA		
HALF SECTIONAL RIGHT VIEW		
1	HANDLE BAR	1
2	SCREW ROD	10
3	HANDLE BAR CAP	1½
4	M16 BOLT	4½
5	VICE BASE	17½
6	MOVEABLE JAW	4½
7	CENTRE LINES	1
SUB-TOTAL		40