higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

# MARKING GUIDELINE

## NATIONAL CERTIFICATE

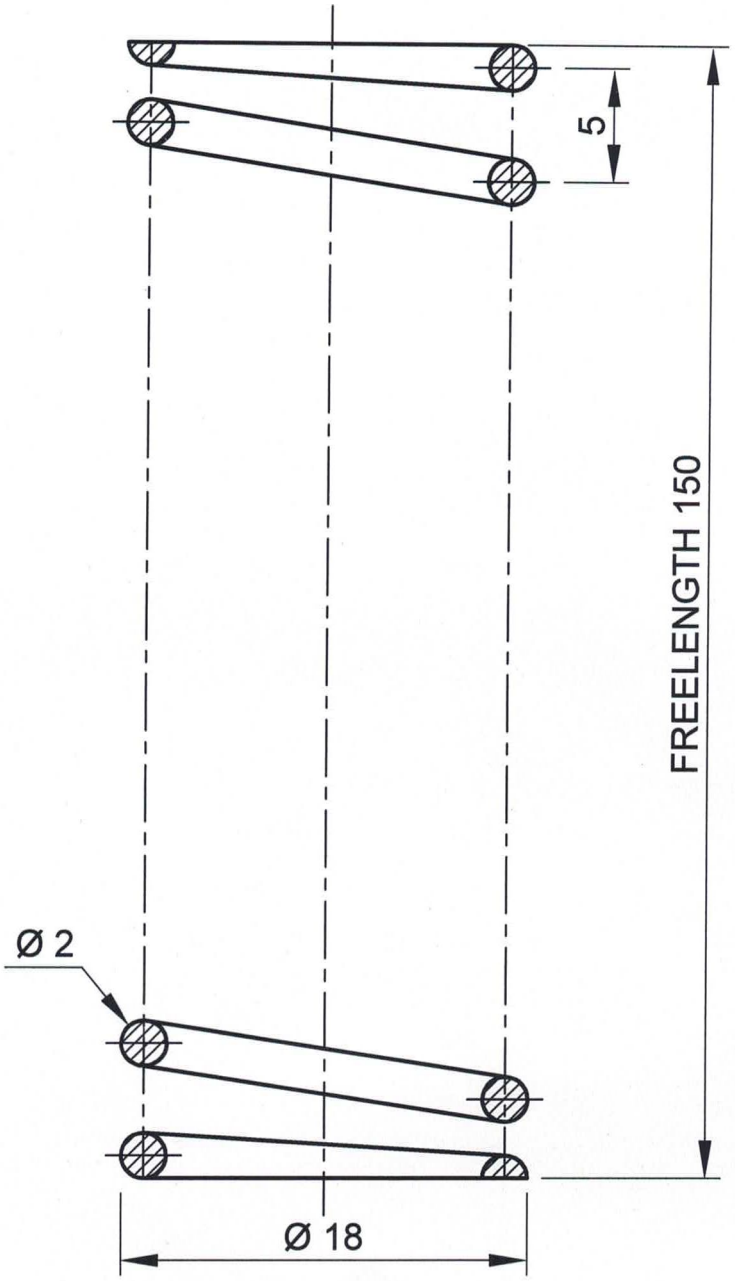
## MECHANICAL DRAUGHTING

## 25 JULY 2019

**This marking guideline consists of 7 pages.**

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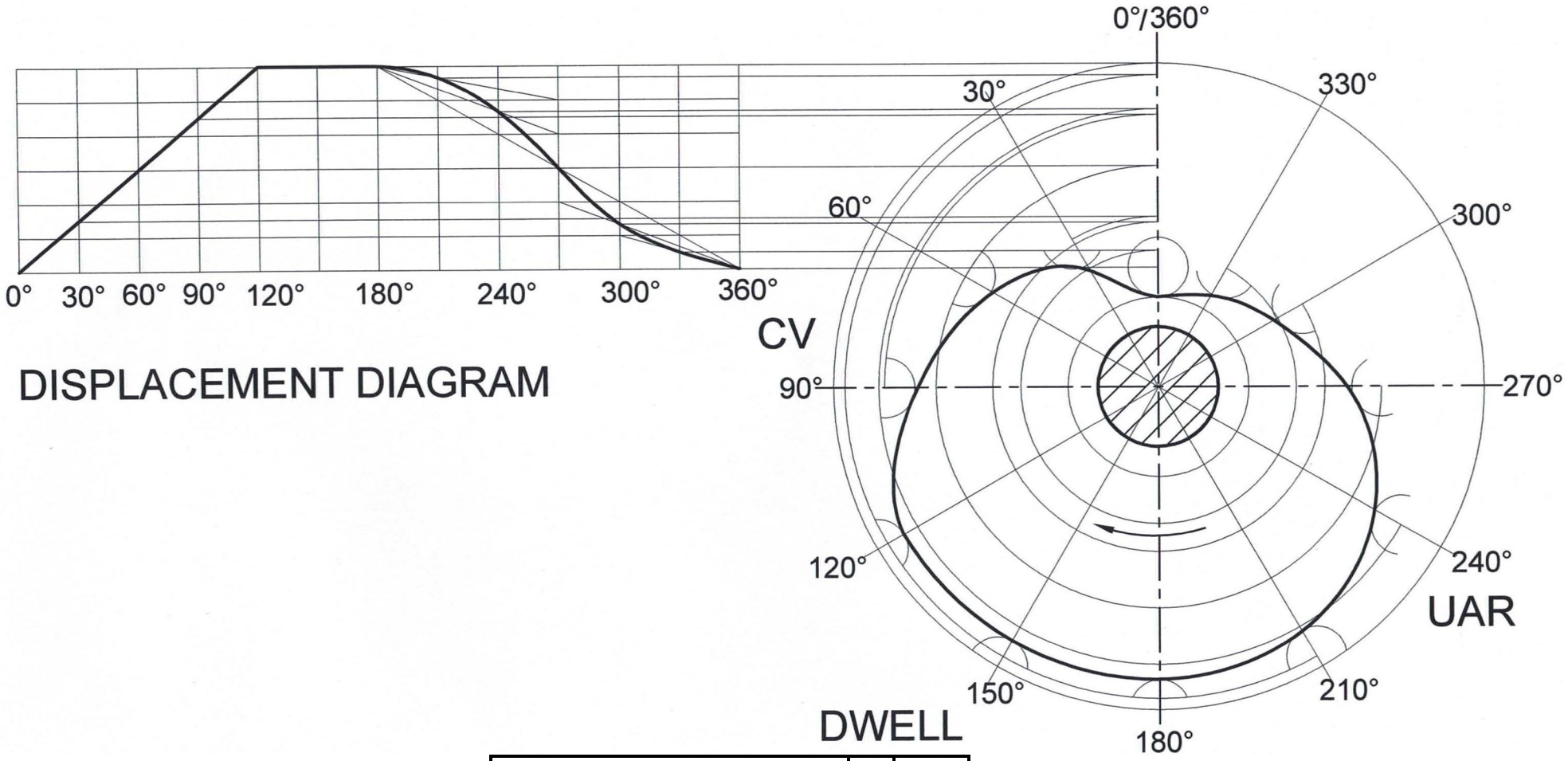
## QUESTION 1: CONVENTIONAL REPRESENTATION (HELICAL SPRING)




| | | |
|---|---|---|
| Correctness | = | 3% |
| Line work | = | 3% |
| Accuracy | = | 2% |
| Direction | = | 1% |
| Dimensions | = | 1% |

**[10]**

**QUESTION 2: CAM PROFILES**

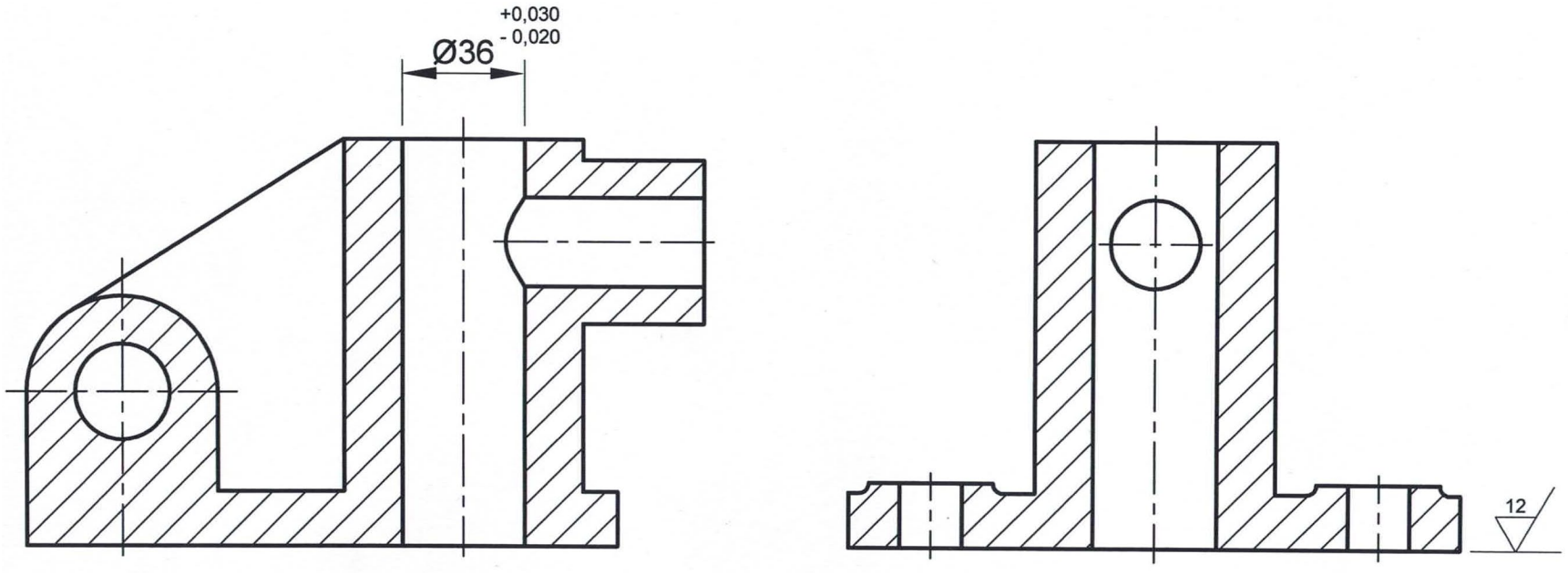



| | | |
|---|---|---|
| Displacement diagram | = | 3% |
| Cam profile | = | 6% |
| Line work | = | 2% |
| Accuracy | = | 3% |
| Keyway detail | = | 1% |

**[15]**

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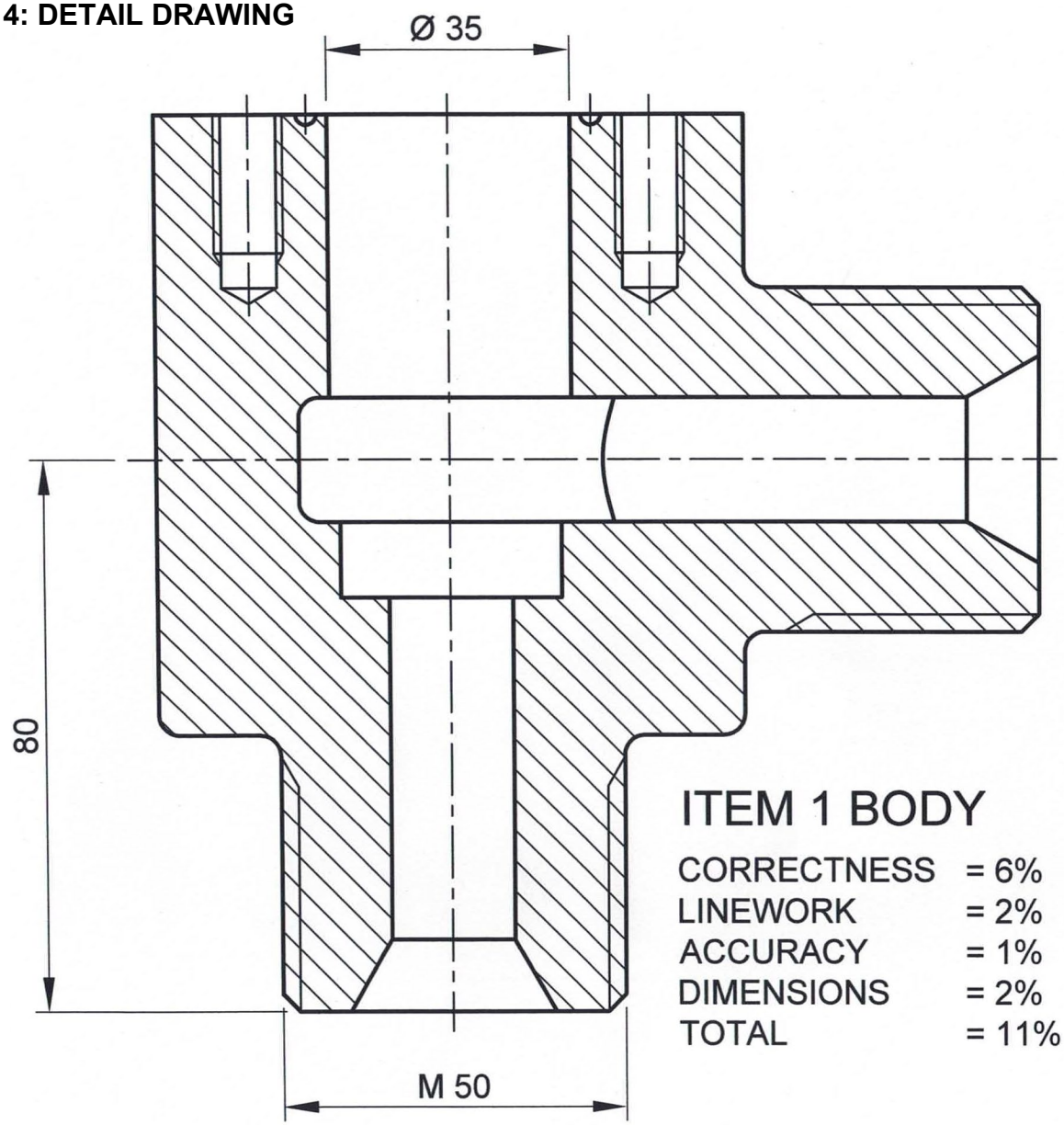
## QUESTION 3: SECTIONAL DRAWING




| | | |
|---|---|---|
| Correctness | = | 10% |
| Line work | = | 4% |
| Accuracy | = | 2% |
| Symbols at A and B | = | 4% |

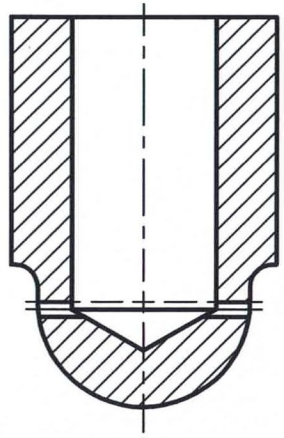
**[20]**

**QUESTION 4: DETAIL DRAWING**




## ITEM 1 BODY

| | |
|---|---|
| CORRECTNESS | = 6% |
| LINEWORK | = 2% |
| ACCURACY | = 1% |
| DIMENSIONS | = 2% |
| TOTAL | = 11% |



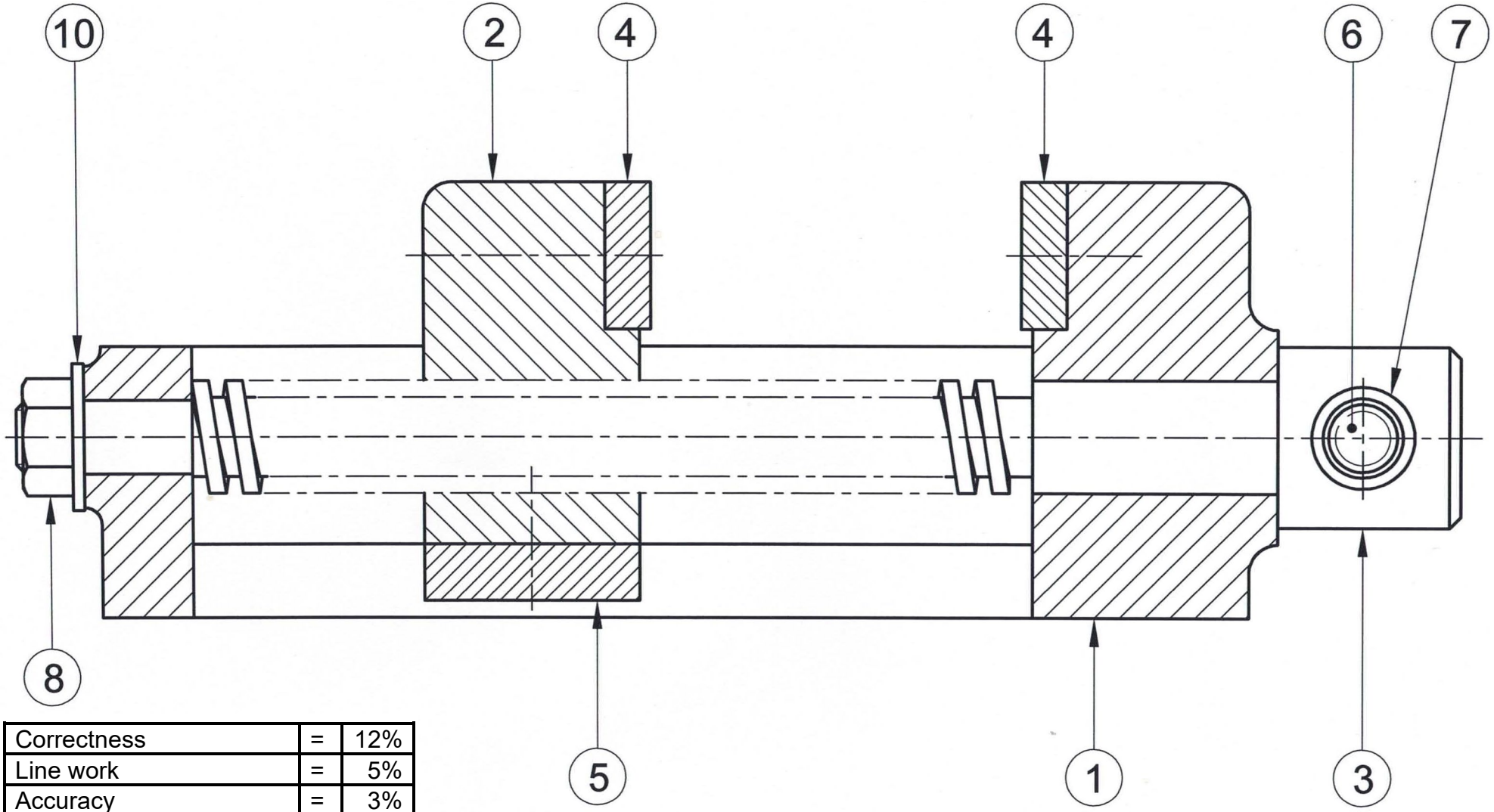
## ITEM 3 VALVE

| | |
|---|---|
| CORRECTNESS | = 4% |
| LINEWORK | = 3% |
| ACCURACY | = 2% |
| TOTAL | = 9% |

**[20]**

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**QUESTION 5: ASSEMBLY DRAWING**




| | | |
|---|---|---|
| Correctness | = | 12% |
| Line work | = | 5% |
| Accuracy | = | 3% |
| Item numbers | = | 3% |
| Thread/Key details | = | 3% |
| Parts list | = | 4% |

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| PARTS LIST | | | |
|---|---|---|---|
| ITEM NUMBER | PART NAME | QUANTITY | MATERIAL |
| ITEM 1 | BASE | 1 OFF | CAST IRON |
| ITEM 2 | JAW | 1 OFF | CAST IRON |
| ITEM 3 | SCREW | 1 OFF | MILD STEEL |
| ITEM 4 | CLAMPING PLATE | 2 OFF | MILD STEEL |
| ITEM 5 | LOCKING PLATE | 1 OFF | MILD STEEL |
| ITEM 6 | LEVER | 1 OFF | MILD STEEL |
| ITEM 7 | STOP BLOCK | 2 OFF | MILD STEEL |
| ITEM 8 | HEXAGONAL NUT | 1 OFF | MILD STEEL |
| ITEM 9 | COUNTERSUNK SCREW | 4 OFF | MILD STEEL |
| ITEM 10 | WASHER | 1 OFF | MILD STEEL |

**[30]**

**QUESTION 6: BALANCED LAYOUT AND NEATNESS**

Layout, neatness and general impression of the DRAWING SHEETS **[5]**

**TOTAL: 100**

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