



**higher education
& training**

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

MARKING GUIDELINE

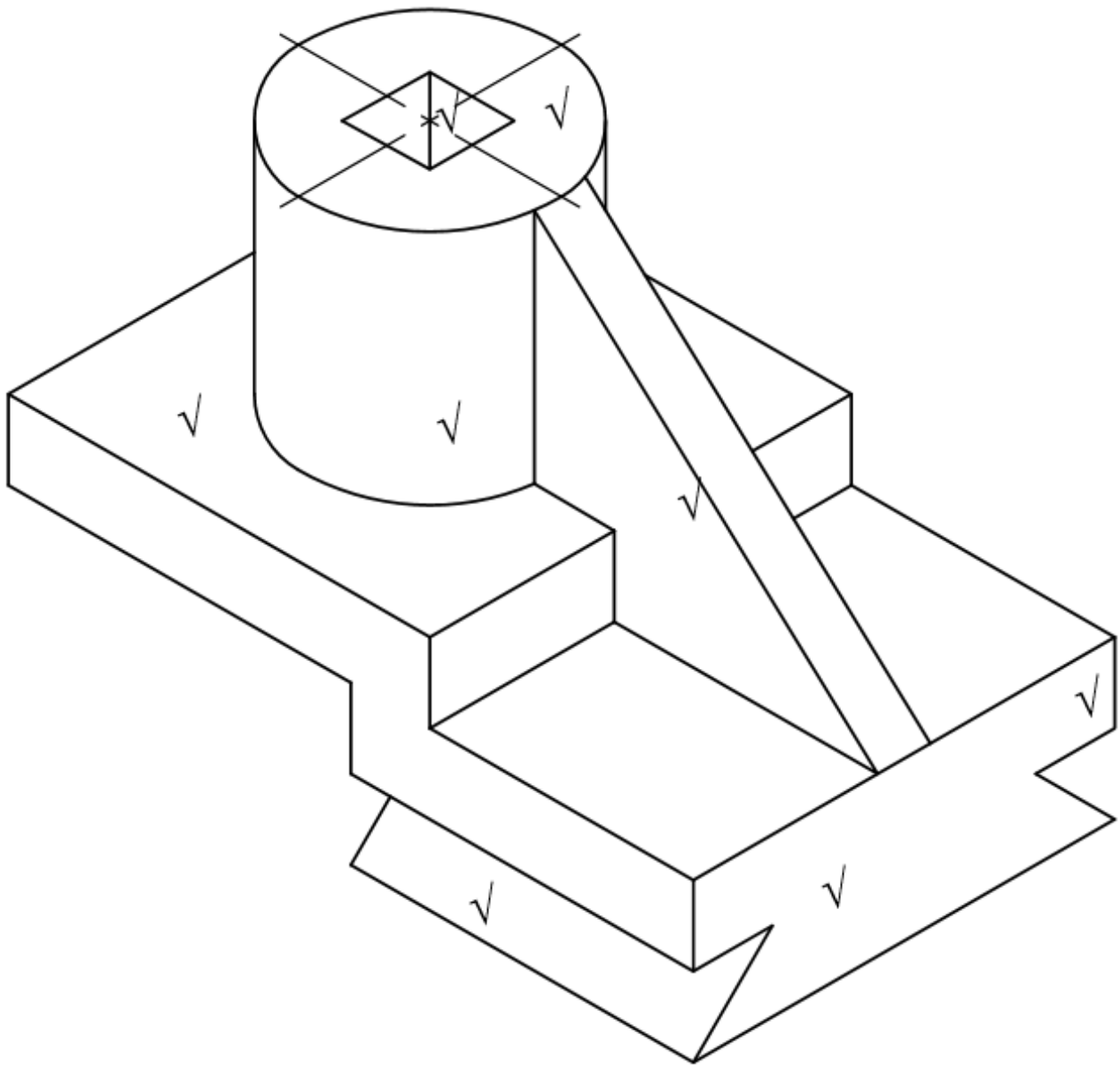
NATIONAL CERTIFICATE ENGINEERING DRAWING N3

25 JULY 2019

This marking guideline consists of 12 pages.

INSTRUCTIONS AND INFORMATION

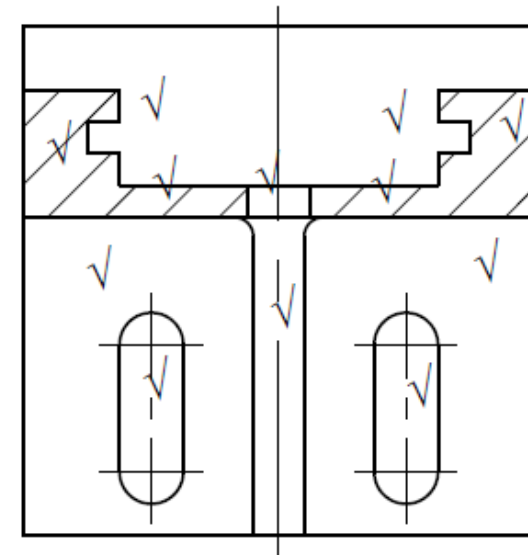
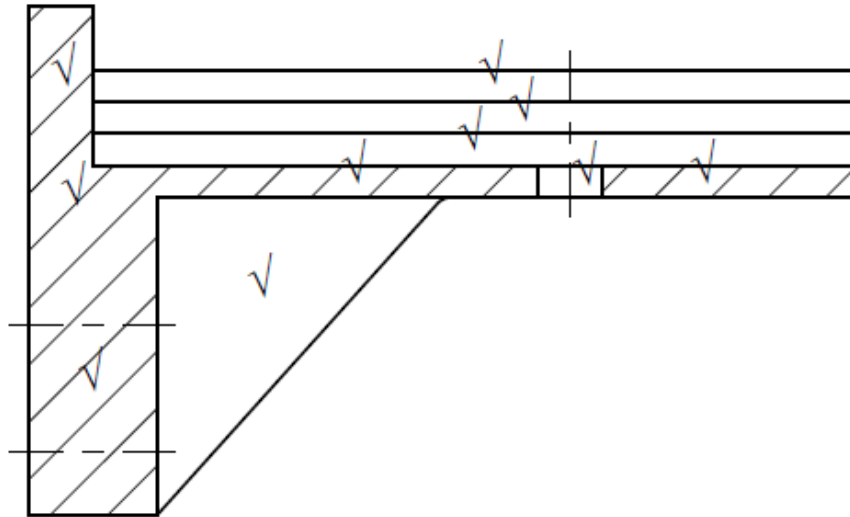
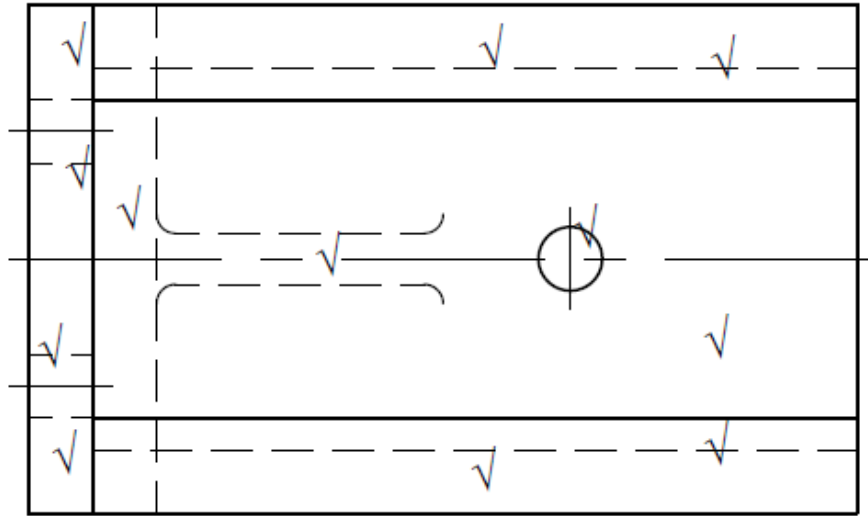
1. Copying and scanning of drawings will affect the accuracy of the drawings on the marking guideline.
 2. ALL markers must prepare their own marking guideline to use during the marking of candidates' drawings.
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QUESTION 1: FREEHAND DRAWING**[10]**

MARK ALLOCATION	
Correctness	4
Line work	3
Accuracy and proportion	3
TOTAL:	[10]

MARK ALLOCATION FOR CORRECTNESS – QUESTION 1 $\frac{1}{2}$ mark for each of the areas indicated on the marking guideline**4 marks**

QUESTION 2: SECTIONAL DRAWING



[25]

MARK ALLOCATION	
Correctness:	
FSFV	5
FSRV	6
TV	6
Line work	3
Accuracy	3
Layout and neatness	2
TOTAL:	25

MARK ALLOCATION FOR CORRECTNESS – QUESTION 2**FSFV**

- | | |
|--|---------|
| 2 marks for correct sectioning | 2 marks |
| ½ mark for the Ø10 hole not sectioned | ½ mark |
| ½ mark for the web not sectioned | ½ mark |
| ½ mark for each of the 4 lines in the area of the groove | 2 mark |

TOTAL **5 marks**

FSRV

- | | |
|--|---------|
| 2 marks for correct sectioning | 2 marks |
| 1 mark for the top part of the back plate not sectioned | 1 mark |
| ½ mark for the Ø10 hole not sectioned | ½ mark |
| ½ mark for the web not sectioned | ½ mark |
| ½ mark for each slot not sectioned | 1 mark |
| 1 mark for the bottom part of the back plate not sectioned | 1 mark |

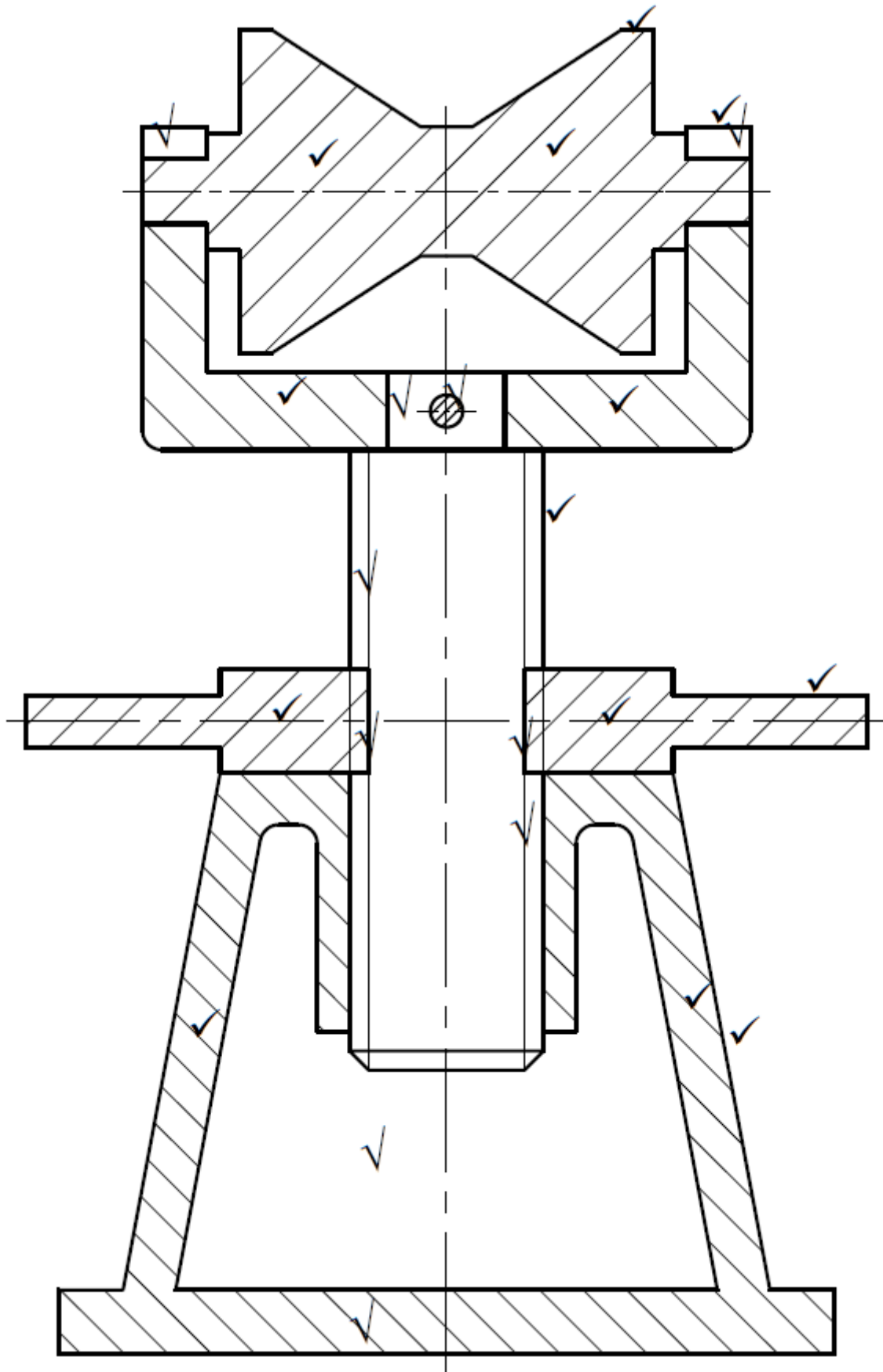
TOTAL **6 marks**

TV

- | | |
|--|--------|
| 1 mark for the top view of the back plate | 1 mark |
| ½ mark for each hidden detail for the slot on the back plate | 1 mark |
| ½ mark for the Ø10 hole | ½ mark |
| ½ mark for each strip on either end of the component | 1 mark |
| ½ mark for each hidden detail indicating the groove | 1 mark |
| ½ mark for not sectioning the base | ½ mark |
| ½ mark for the hidden detail of the web | ½ mark |
| ½ mark for the hidden detail indicating the thickness of the bottom part of the back plate | ½ mark |

TOTAL **6 marks**

QUESTION 3: ASSEMBLY DRAWING



[30]

MARK ALLOCATION	
Correctness	18
Line work	5
Accuracy	5
Layout and neatness	2
TOTAL:	30

MARK ALLOCATION FOR CORRECTNESS – QUESTION 3

- 1 mark for each of items 1 to 5 correctly assembled 5 marks
 ½ mark for Item 6 correctly positioned ½ mark

Item 1

- 2 marks for correct sectioning 2 marks
 ½ mark for sectioning the base ½ mark
 ½ mark for the space inside Item 1 ½ mark

Item 2

- 2 marks for correct sectioning 2 marks
 ½ mark for Ø18 hole not sectioned ½ mark
 ½ mark for not sectioning the part above the roller on each end 1 mark

Item 3

- 2 mark for correct sectioning 2 marks

Item 4

- 2 mark for correct sectioning 2 marks

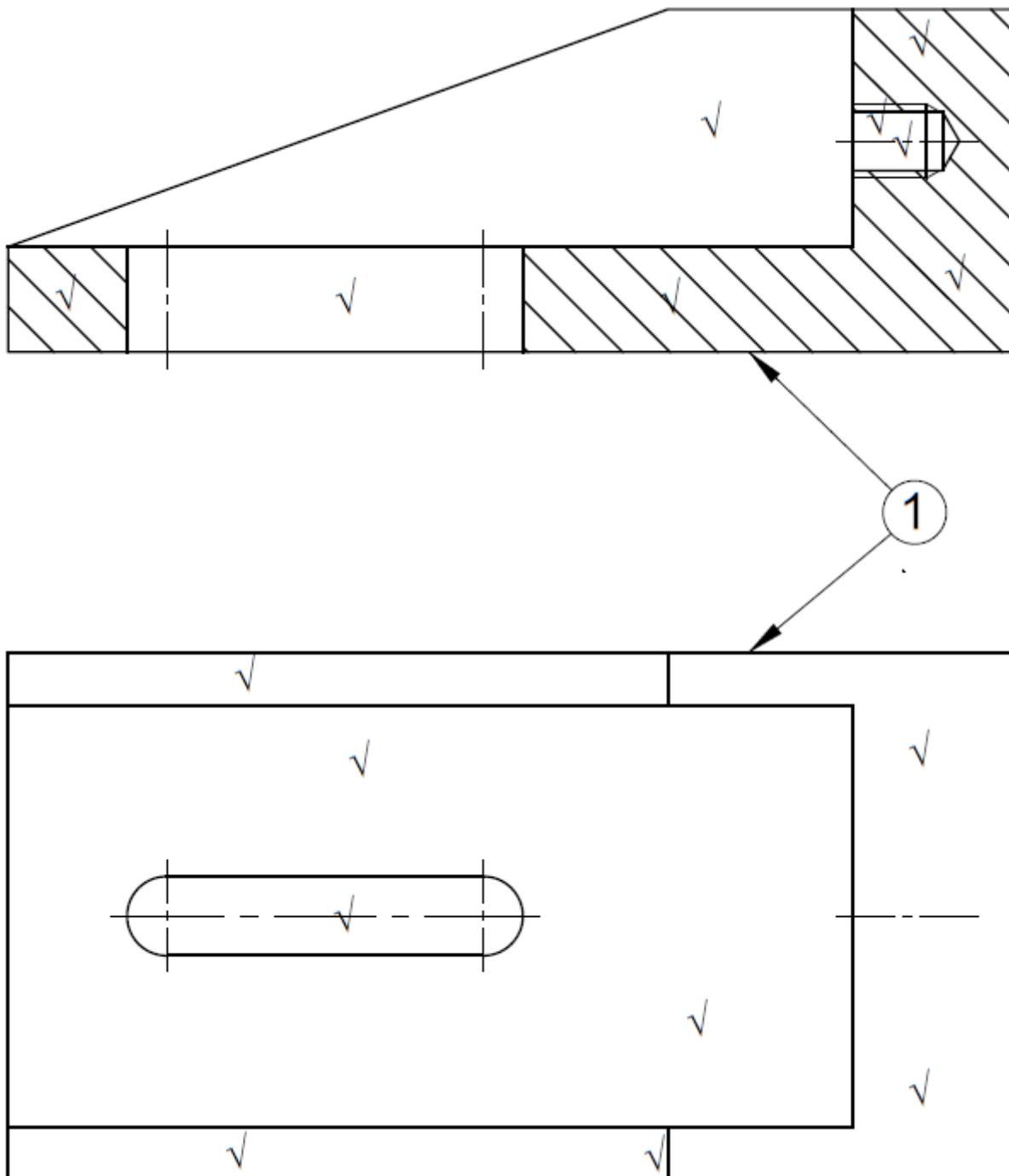
Item 5

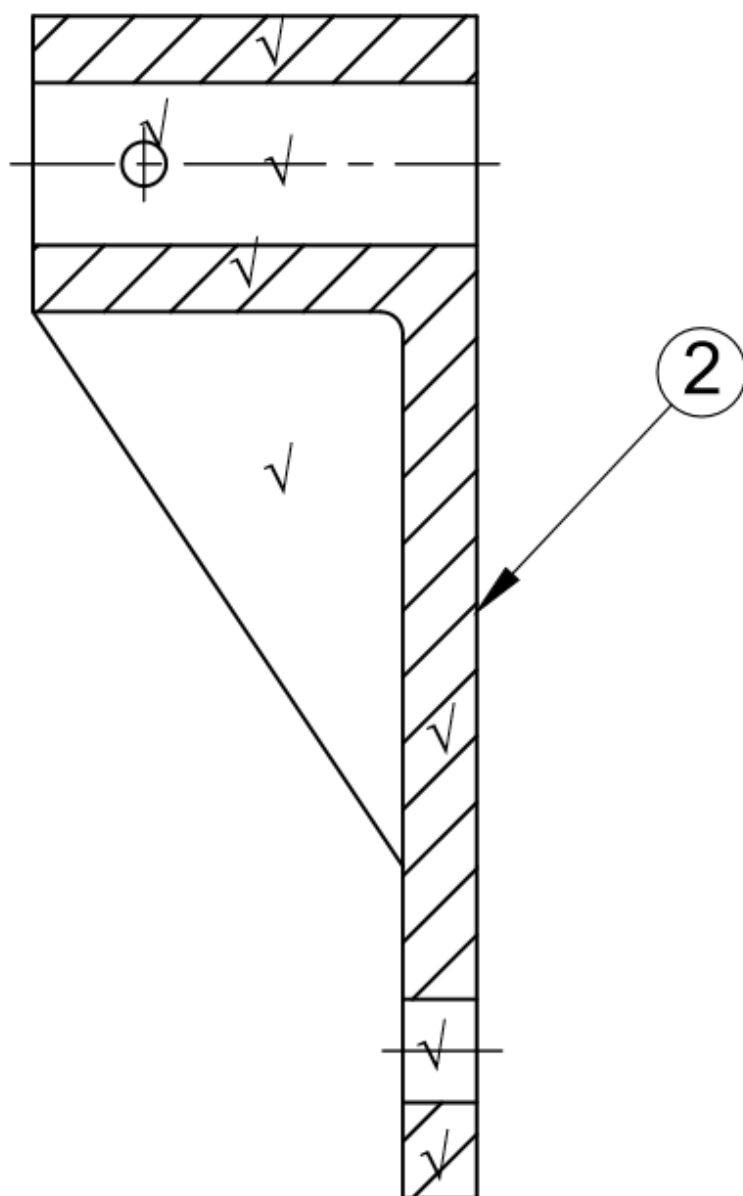
- ½ mark for the thread detail above and below the adjustment wrench 1 mark
 1 mark for the thread detail of the adjustment wrench 1 mark

TOTAL

18 marks

QUESTION 4: DETAILED DRAWING





[20]

MARK ALLOCATION	
Correctness:	
FSFV (Item 1)	4
TV (Item 1)	4
FSFV (Item 2)	4
Line work	3
Accuracy	3
Layout and neatness	2
TOTAL:	20

MARK ALLOCATION FOR CORRECTNESS – QUESTION 4**FSFV (ITEM 1)**

2 marks for correct sectioning	2 marks
1 mark for the drilled and tapped hole	1 mark
½ mark for the slot not sectioned	½ mark
½ mark for the web not sectioned	½ mark

TOTAL **4 marks**

TV (ITEM 1)

1 mark for base not sectioned	1 mark
½ mark for the slot	½ mark
1 mark for the top view of the upright not sectioned	1 mark
½ mark for each web	1 mark
½ mark for the 2 lines showing the change in planes of the web	½ mark

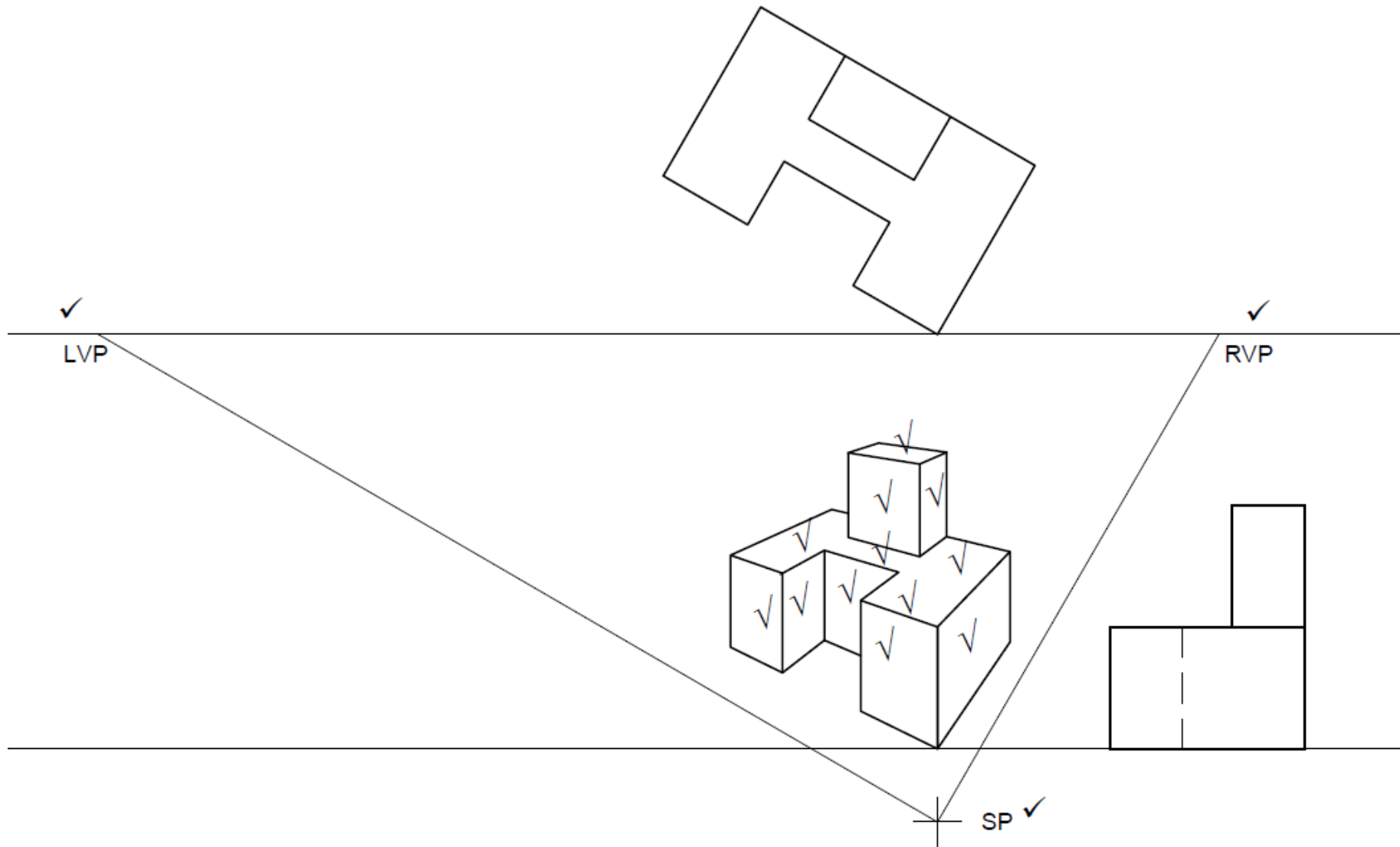
TOTAL **4 marks**

FSFV (ITEM 2)

2 marks for correct sectioning	2 marks
½ mark for the Ø14 hole not sectioned	½ mark
½ mark for the Ø22 hole not sectioned	½ mark
½ mark for the Ø6 hole	½ mark
½ mark for the web not sectioned	½ mark

TOTAL **4 marks**

QUESTION 5: PERSPECTIVE DRAWING



[15]

MARK ALLOCATION	
Correctness	6
Line work	3
Accuracy	3
SP + LVP + RVP	3
TOTAL:	15

MARK ALLOCATION FOR CORRECTNESS – QUESTION 5

½ mark for each of the areas indicated on the marking guideline **9 marks**

TOTAL: 100