



higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

MARKING GUIDELINE

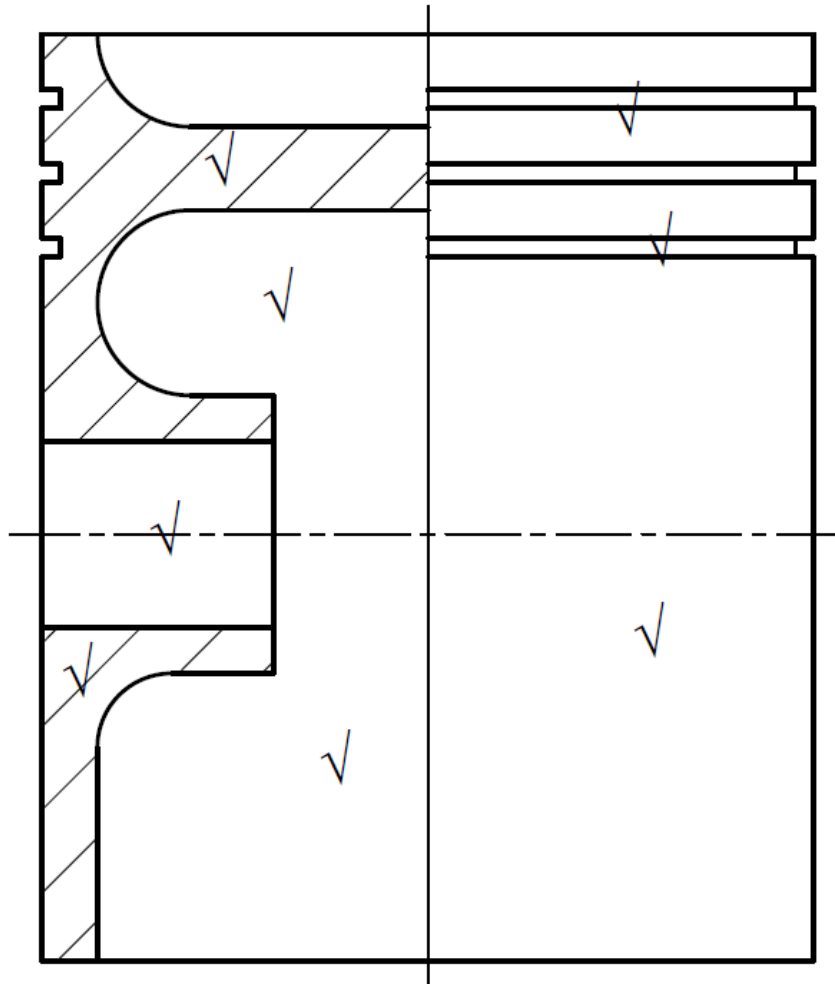
NATIONAL CERTIFICATE ENGINEERING DRAWING N3

15 April 2021

This marking guideline consists of 11 pages.

INSTRUCTIONS AND INFORMATION

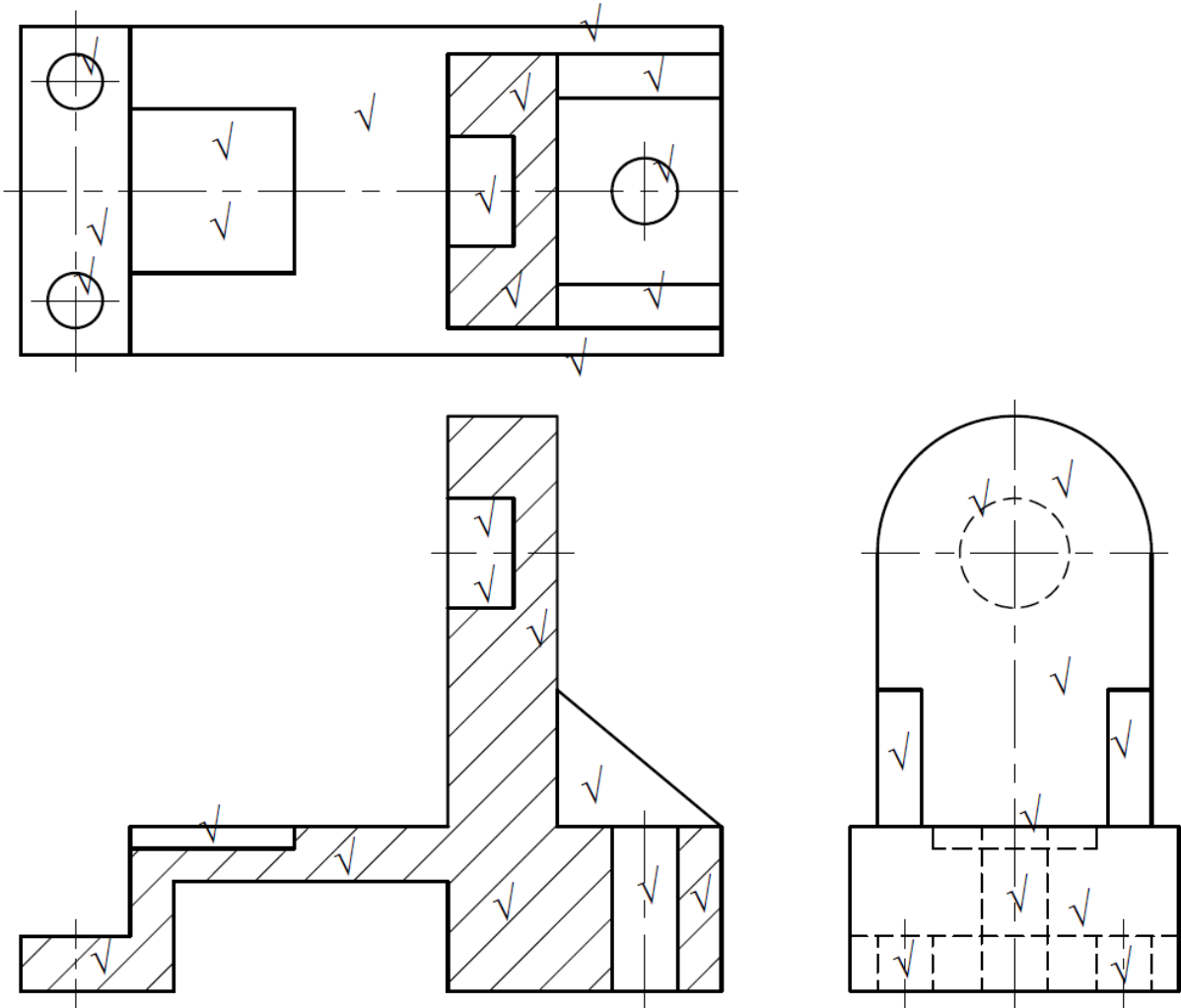
1. Copying and scanning of drawings will affect the accuracy of the drawings on the marking guideline.
 2. ALL markers must prepare their own marking guideline to use during the marking of candidates' drawings.
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QUESTION 1: FREEHAND DRAWING**[10]**

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
RV	5
FSTV	7
Line work	3
Accuracy	3
Layout and neatness	2
TOTAL:	25

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

- 2½ marks for correct sectioning
- 1 mark for the Ø 20 blind hole not sectioned
- ½ mark for the Ø 12 hole not sectioned
- ½ mark for the web not sectioned
- ½ mark for the 30 x 30 slot

- 2½ marks
- 1 mark
- ½ mark
- ½ mark
- ½ mark

TOTAL **5 marks**

RV

- 1 mark for the upright
- ½ mark for each web
- ½ marks for the base
- ½ mark for the Ø 20 blind hole shown as hidden detail
- ½ mark for the slot shown as hidden detail
- ½ mark for the Ø12 hole shown as hidden detail
- ½ mark for each Ø10 hole shown as hidden detail

- 1 mark
- 1 mark
- ½ mark
- ½ mark
- ½ mark
- ½ mark
- 1 mark

TOTAL **5 marks**

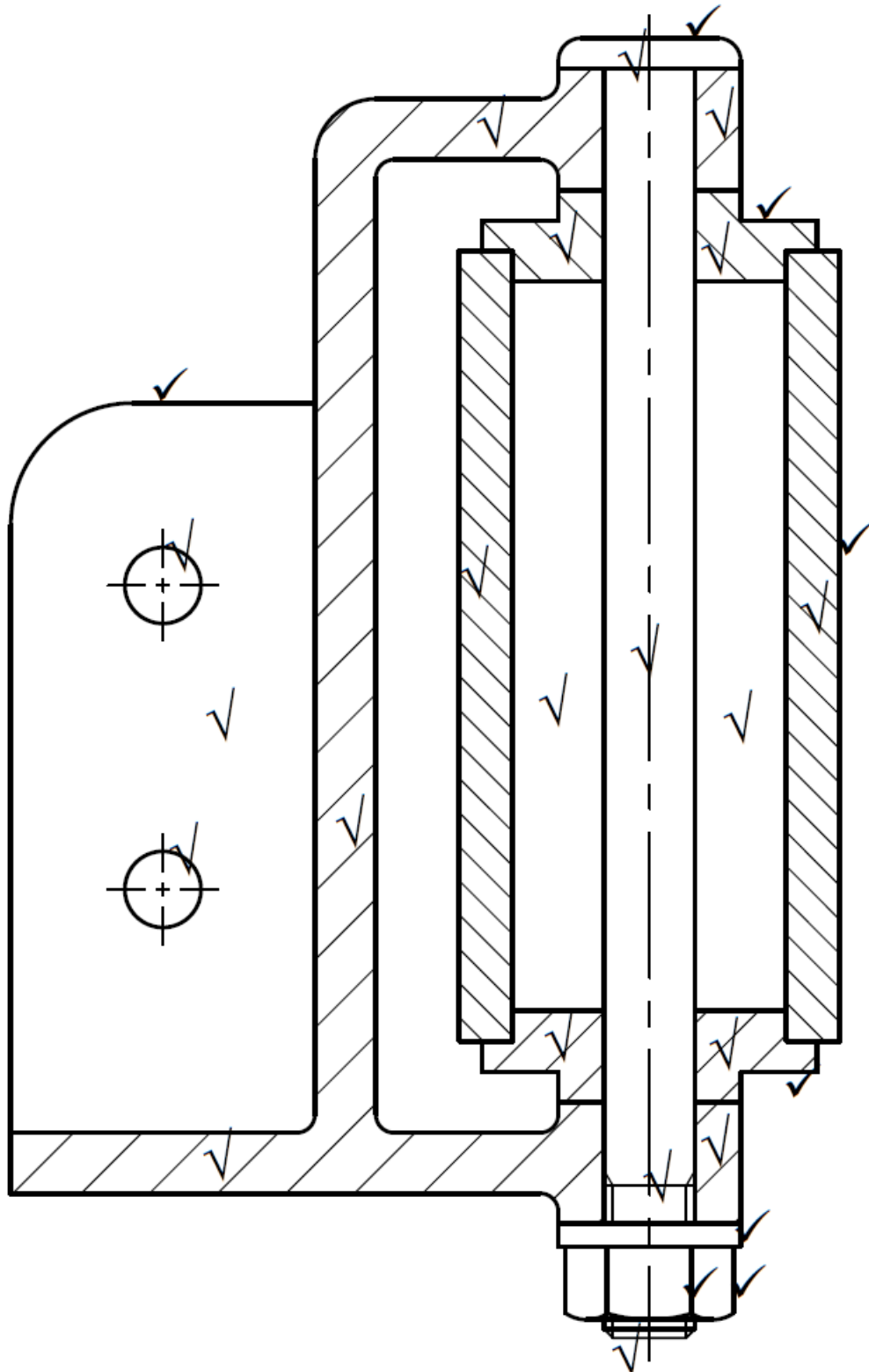
FSTV

- 1 mark for correct sectioning
- ½ mark for the Ø 20 blind hole not sectioned
- ½ mark for each the Ø 12 hole not sectioned
- ½ mark for each web not sectioned
- 1½ marks for the base
- 1 mark for the 30 x 30 slot
- ½ mark for the stepped base
- ½ mark for each Ø10 hole not sectioned

- 1 mark
- ½ mark
- ½ mark
- 1 mark
- 1½ mark
- 1 mark
- ½ mark
- 1 mark

TOTAL **7 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 item correctly assembled (NB: 2 x Item3) 7 marks

Item 1

2½ marks for correct sectioning 2½ marks
 ½ mark for each Ø10 hole not sectioned 1 mark
 ½ mark for the not sectioned portion ½ mark

Item 2

1 mark for correct sectioning 1 mark
 ½ mark for each not sectioned area 1 mark

Item 3

1 mark for correct sectioning of each Item 3 2 marks

Item 4

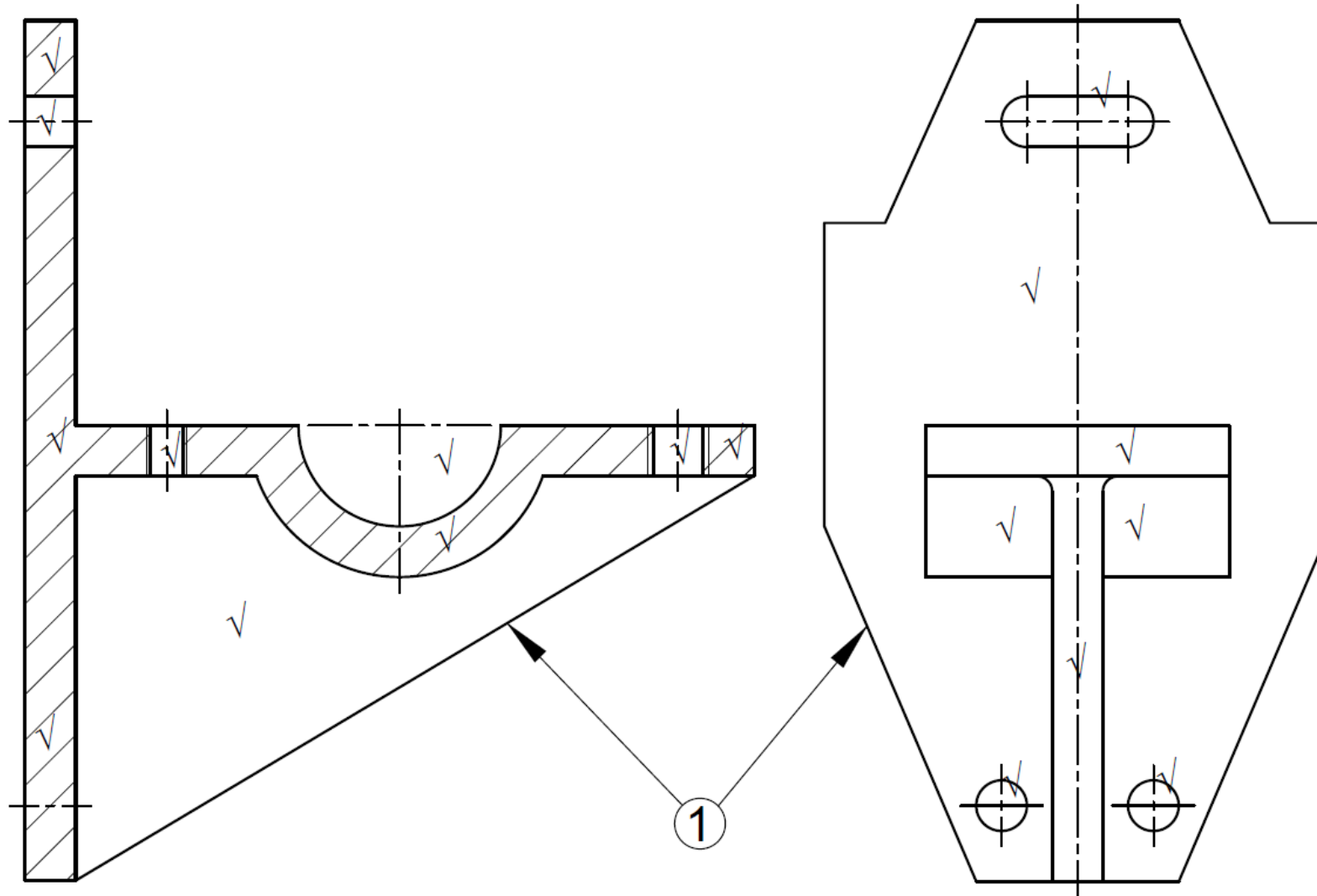
½ mark for not sectioning the head ½ mark
 ½ mark for not sectioning the shaft ½ mark
 ½ mark for the threaded portion above the nut ½ mark
 ½ mark for the threaded portion below the nut ½ mark

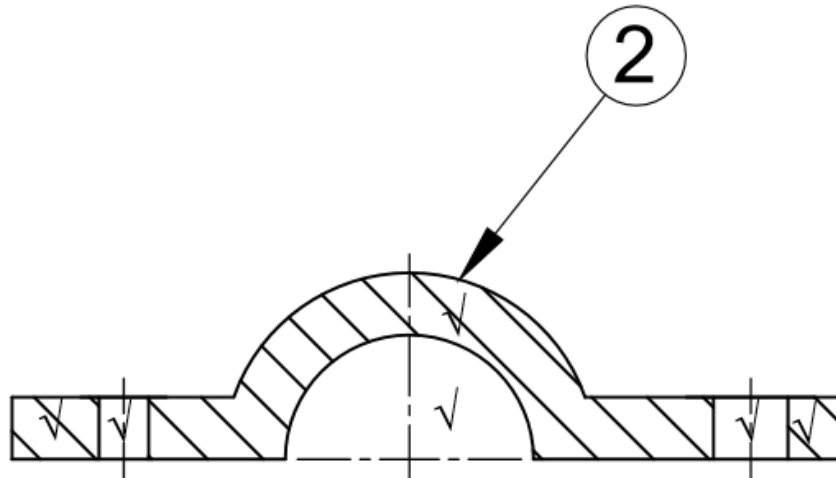
Item 6

1 mark for correctly drawing the nut 1 mark

TOTAL **18 marks**

QUESTION 4: DETAILED DRAWING





[20]

MARK ALLOCATION	
Correctness:	
FSFV (Item 1)	5
RV (Item 1)	4
FSFV (Item 2)	3
Line work	3
Accuracy	3
Layout and neatness	2
TOTAL:	20

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

2½ marks for correct sectioning
½ mark for each hole not sectioned
½ mark for the R25 slot
½ mark for the web not sectioned

2½ marks
1½ mark
½ mark
½ mark

TOTAL **5 marks**

RV (ITEM 1)

½ mark for the upright
½ mark for the base
1 mark for the right view of the curved portion
½ mark for the web
½ mark for each Ø10 hole
½ mark for the slot

½ mark
½ mark
1 mark
½ mark
1 mark
½ mark

TOTAL **4 marks**

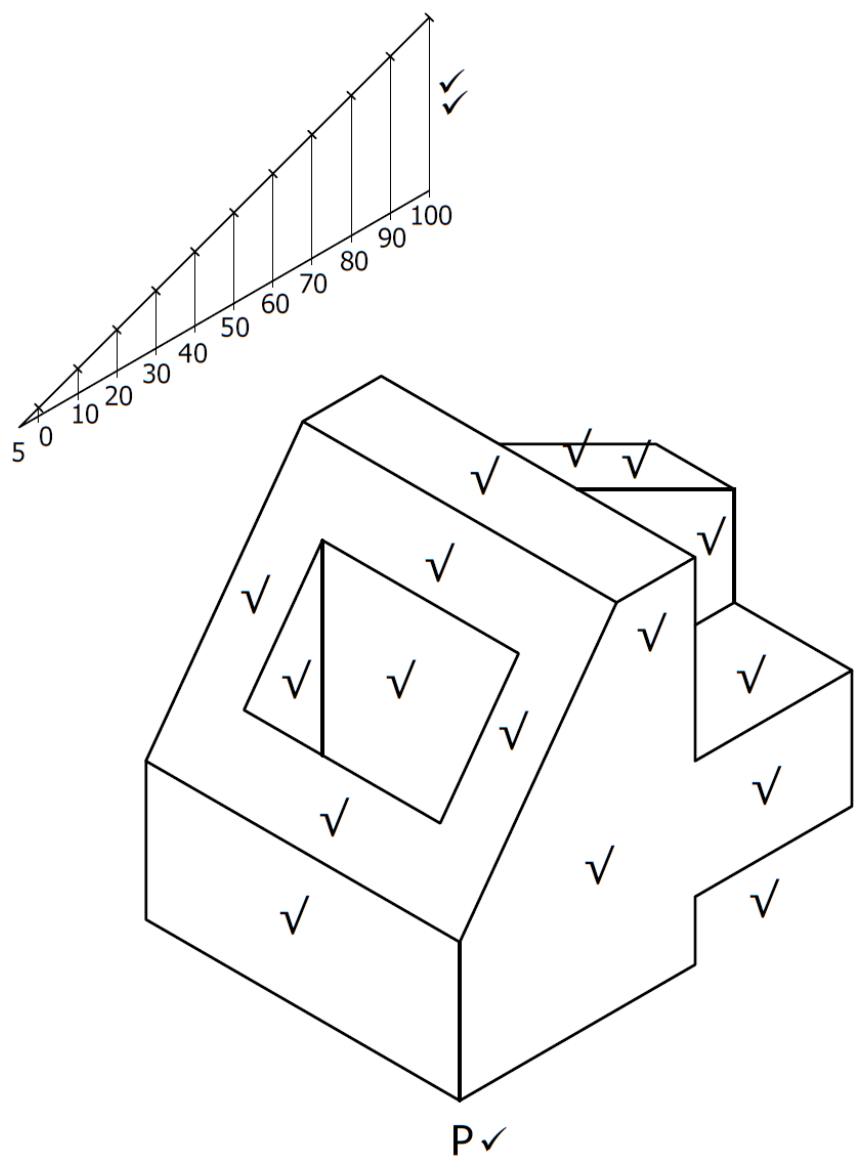
FSFV (ITEM 1)

1½ marks for correct sectioning
½ mark for each hole not sectioned
½ mark for the R25 slot

1½ mark
1 marks
½ mark

TOTAL **3 marks**

QUESTION 5: ISOMETRIC PROJECTION



: [15]

MARK ALLOCATION	
Correctness	8
Line work	2
Accuracy	2
Scale	2
Point P	1
TOTAL:	15

MARK ALLOCATION FOR CORRECTNESS – QUESTION 5

½ mark for each of the areas indicated on the marking guideline 8 marks

TOTAL: 100