

higher education & training

Department: Higher Education and Training REPUBLIC OF SOUTH AFRICA

MARKING GUIDELINE

NATIONAL CERTIFICATE ENGINEERING DRAWING N3

18 JULY 2018

This marking guideline consists of 11 pages.

NOTE: \checkmark = 1 MARK

 $\sqrt{}$ = $\frac{1}{2}$ MARK

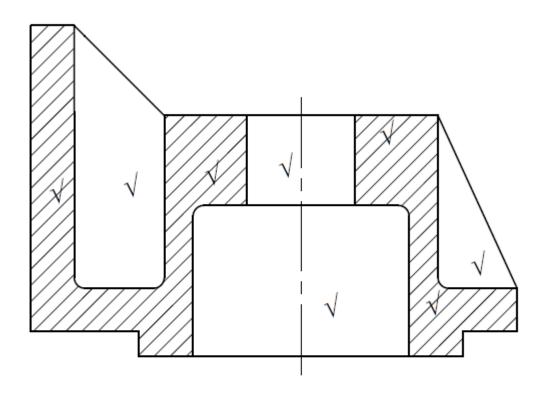
INSTRUCTIONS AND INFORMATION

Copying and scanning of drawings will affect the accuracy of the drawings on the marking guideline.

ALL markers are requested to prepare their own marking guideline to use during the marking of the candidates' answer sheets.

QUESTION 1: FREEHAND DRAWING





MARK ALLOCATION

CORRECTNESS 4%

LINEWORK 3%

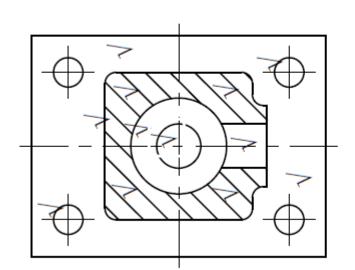
ACCURACY & PROPORTION 3%

TOTAL 10%

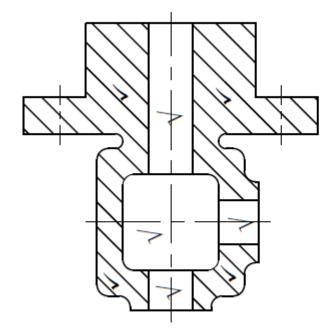
MARK ALLOCATION FOR CORRECTNESS – QUESTION 1

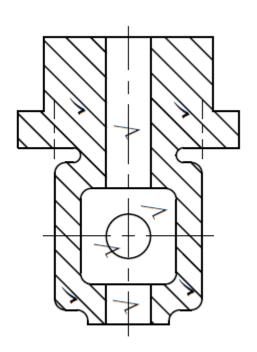
½ mark for each of the areas indicated on the marking 4 marks guideline

QUESTION 2: SECTIONAL DRAWING



MARK ALLOCATION
CORRECTNESS:
FSFV 6%
FSTV 6%
FSLV 6%
LINEWORK 3%
ACCURACY 3%
LAYOUT & NEATNESS 1%
TOTAL 25%







MARK ALLOCATION FOR CORRECTNESS - QUESTION 2

FSTV

	ТОТ	AL 6	,	marks
1/2	mark for each hole not sectioned	2		marks
4	marks for correct sectioning	4		marks

FSFV

, 2	mant for oddin holo hot oddionod	TOTAL		marks
1/2	mark for each hole not sectioned		2	marks
4	marks for correct sectioning		4	marks

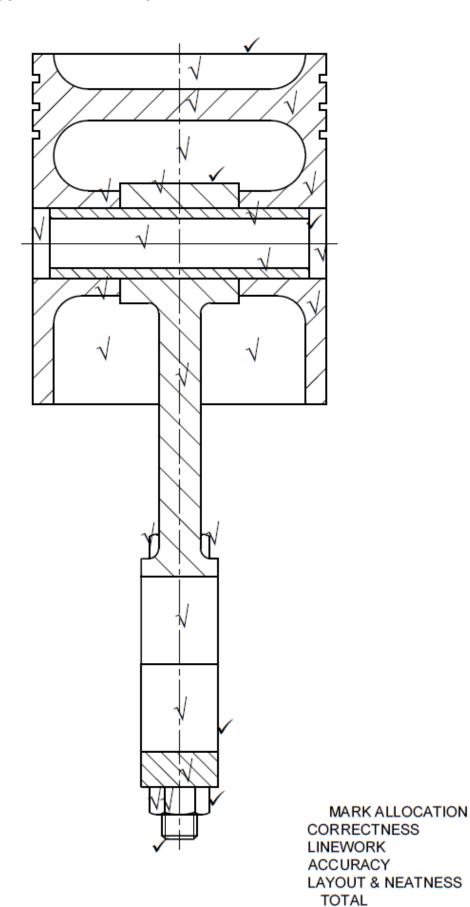
FSTV

2	marks for correct sectioning		2	marks
1/2	mark for the Ø12 hole not sectioned		1/2	mark
1/2	mark for the Ø26 circle		1/2	mark
1/2	mark for the Ø12 circle		1/2	mark
1/2	mark for drawing the square portion in the centre		1/2	mark
1	mark for "flange" not sectioned		1	mark
1	mark for the 4 x Ø8 holes in the "flange"		1	mark
		TOTAL	6	marks

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QUESTION 3: ASSEMBLY DRAWING





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18% 5%

5%

2%

30%

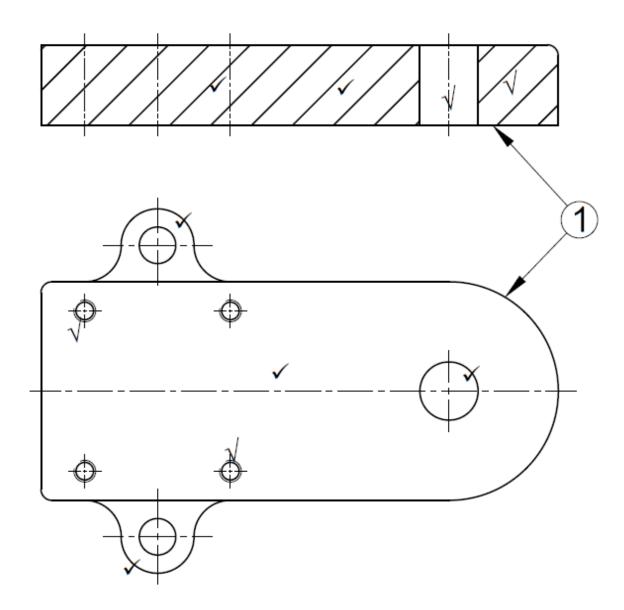
ENGINEERING DRAWING N3

MARK ALLOCATION FOR CORRECTNESS – QUESTION 3

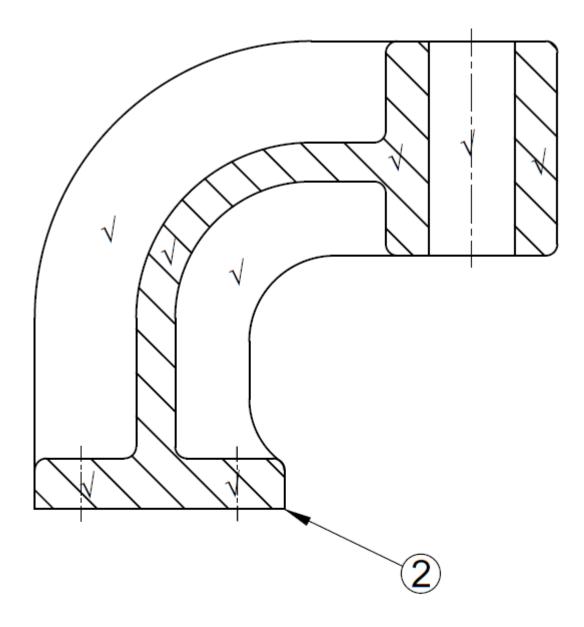
	TOTAL 18	marks
Item 6 1 mark for correctly drawing the nut	1	mark
Item 5 1 mark for the visible portion of the bolt head	1	mark
1 mark for correct sectioning 1/2 mark for not sectioning the hole 1/2 mark each gap on the ends of Item 4	1 ½ 1	
 Item 3 ½ mark for correct sectioning ½ mark for not sectioning the "bearing" portion of 	$\frac{1}{2}$ f big end $\frac{1}{2}$	mark mark
 Item 2 1 mark for correct sectioning ½ mark for not sectioning the "bearing" portion of 	1 f Item 2 ½	mark mark
Item 1 3 marks for correct sectioning ½ mark for each of the 4 portions not sectioned	3 2	
mark for each of items 1 to 6 correctly assemb	oled 6	marks

QUESTION 4: DETAILED DRAWING





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MARK ALLOCATION	
CORRECTNESS:	
FSFV (ITEM 1)	3%
TV (ITEM 1)	5%
FSFV (ITEM 2)	4%
LINEWORK	3%
ACCURACY	3%
LAYOUT & NEATNESS	2%
TOTAL	20%

MARK ALLOCATION FOR CORRECTNESS - QUESTION 4

FSFV (ITEM 1)

	-	TOTAL	3	marks
1/2	mark for not sectioning the hole		1/2	marks
21/2	marks for correct sectioning		$2\frac{1}{2}$	marks

TV (ITEM 1)

•				markS
1	mark for each "lobe" with the hole	2)	marks
1	mark for 4 tapped holes	1		mark
1	mark for the Ø16 hole	1		mark
1	mark for not sectioning the flange	1		mark

FSTFV (ITEM 2)

2½	marks for correct sectioning	21/2	marks
1/2	mark for not sectioning the Ø22 hole	1/2	mark
1/2	mark for each web not sectioned	1	mark
	TOTAL	4	marks

MARK ALLOCATION FOR CORRECTNESS - QUESTION 5

1/2 mark for each of the areas indicated on the marking guideline 8 marks

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QUESTION 5: PERSPECTIVE DRAWING

