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basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

NATIONAL SENIOR CERTIFICATE

GRADE 12

ENGINEERING GRAPHICS AND DESIGN P2

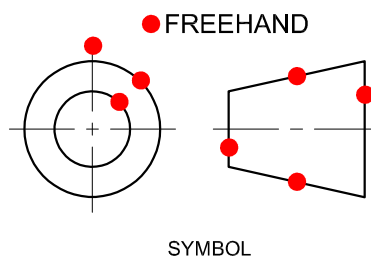
NOVEMBER 2019

MARKING GUIDELINES

MARKS: 100

These marking guidelines consist of 6 pages.

ANSWERS		
1	TO CHECK THE DRAWING	1
2	www.foundry.co.za	1
3	MJIG-12-V5	1
4	JR MANUFACTURES	1
5	30	1
6	SECTIONAL FRONT VIEW ON T-T	2
7	REMOVED SECTION	1
8	OFFSET or MULTI-PLANE	1
9	A: R4 B: 15 C: 12 D: 84 E: Ø7	5
10	199	1
11	WEB or RIB	1
12	18 mm	1
13	COUNTER BORE	1
14	8	1
15	HATCHING IN OPPOSITE DIRECTIONS	2
16	30.85	1
17	DIRECTION OF LAY	d
	ROUGHNESS VALUE	a
	SAMPLING LENGTH	c
	MACHINING ALLOWANCE	e
18	<i>See below</i>	4
TOTAL		30

ANSWER 18

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Please turn over

The diagram shows an isometric view of a mechanical component. It features a base plate with a central rectangular cutout and a semi-circular cutout on the right side. A vertical plate is attached to the left side, and a horizontal plate is attached to the top. The drawing includes numerous marking points: red circles with the number '3' and blue circles with the number '2'. There are also construction lines for a circle, with pink checkmarks and the number '4' indicating correct construction and center lines. In the top left corner, two triangles are shown with orange checkmarks and the number '1', indicating correct placement. The letter 'P' is placed at the bottom center of the drawing.

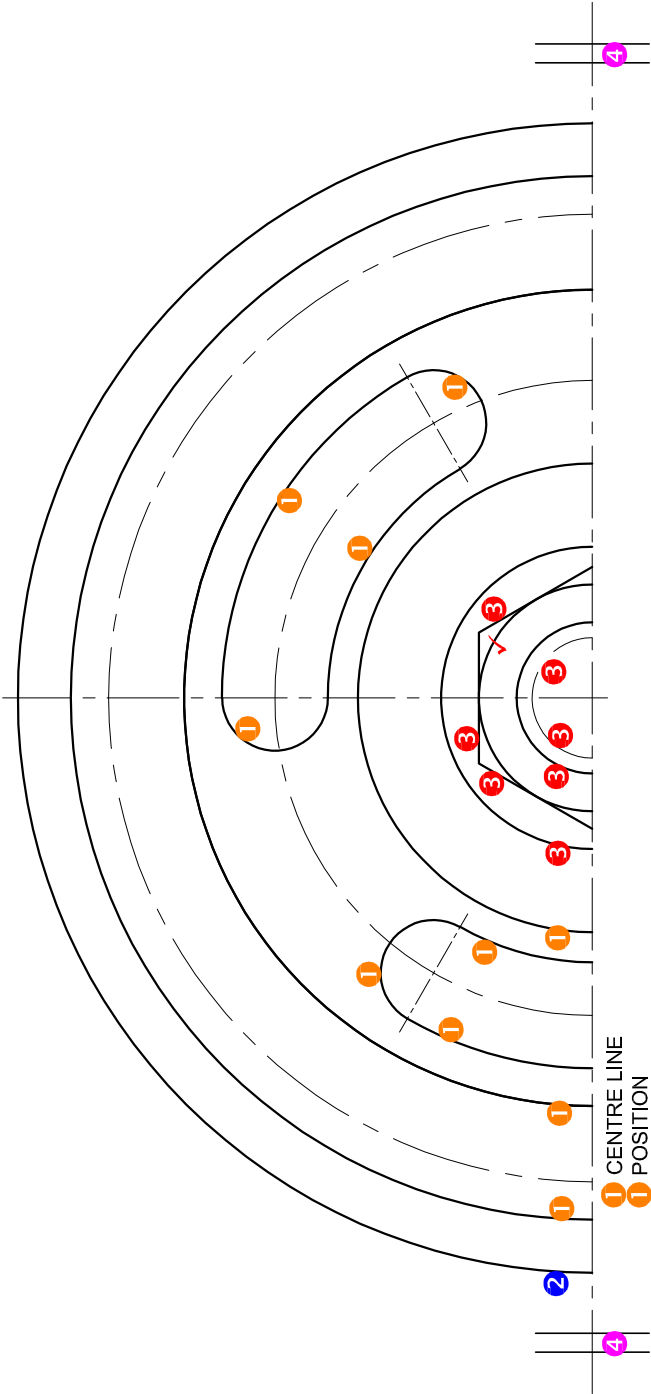
✓1 CORRECT PLACEMENT

✓4 CIRCLE CONSTRUCTION
✓4 CENTRE LINES

P

ASSESSMENT CRITERIA		
1	PLACEMENT + AUX. VIEW	3
2	FRONT PORTION	11
3	BACK PORTION	21 $\frac{1}{2}$
4	CIRCLE + CIRCLE CONSTRUCTION + CL	5 $\frac{1}{2}$
TOTAL		41

PAPER 2 QUESTION 3
GRADE 12
NSC 2019
MARKING GUIDELINES



ASSESSMENT CRITERIA			
TOP VIEW			
1	GEAR	6	
2	COLLAR PLATE	$\frac{1}{2}$	
3	M20 NUT + WASHER	$4\frac{1}{2}$	
4	SYMMETRY	1	
SUBTOTAL		12	

PAPER 2 QUESTION 4
GRADE 12
NSC 2019
MARKING GUIDELINES

HEIGHT 8

CONVENTION CL

CONVENTION CL

NUT + WASHER NOT HATCHED

SHAFT NOT HATCHED

CENTRE LINE/ NOT SOLID LINE

6H

7H

8H

1H

2H

3H

4H

5H

6H

7H

8H

9H

10H

11H

12H

13H

14H

15H

16H

17H

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19H

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