higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

MARKING GUIDELINE

NATIONAL CERTIFICATE (VOCATIONAL)

DRAWING OFFICE PROCEDURES AND TECHNIQUES

(First paper)

NQF LEVEL 2

17 November 2022

This marking guideline consists of 6 pages.

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QUESTION 1

1.1 Language (1)

1.2
- Communicate an idea, plan, or object.
- It is a problem-solving technique.
- It is a design tool.
- It is a method of recording possible solutions.
- It is a basic form of communication. (Any 3 × 1) (3)

1.3 Creative (1)

1.4
- Group
- Set (Any ONE) (1)

1.5 The goal of presentation communication is to provide a true-to-life image✓ of the finished object✓ that highlights the primary features and specifications.✓ (3)

1.6
- Has the ability to work accurately, methodically, neatly and logically.
- Communicates verbally and in writing with people on all levels, from top management to shop floor workers.
- Uses measuring instruments properly and accurately.
- Has a good working knowledge of the field in which the drawings will be used.
- Accurately visualises shapes and sizes in three dimensions.
- Has problem-solving skills and not only comes up with solutions, but also applies them. (Any 5 × 1) (5)

[14]

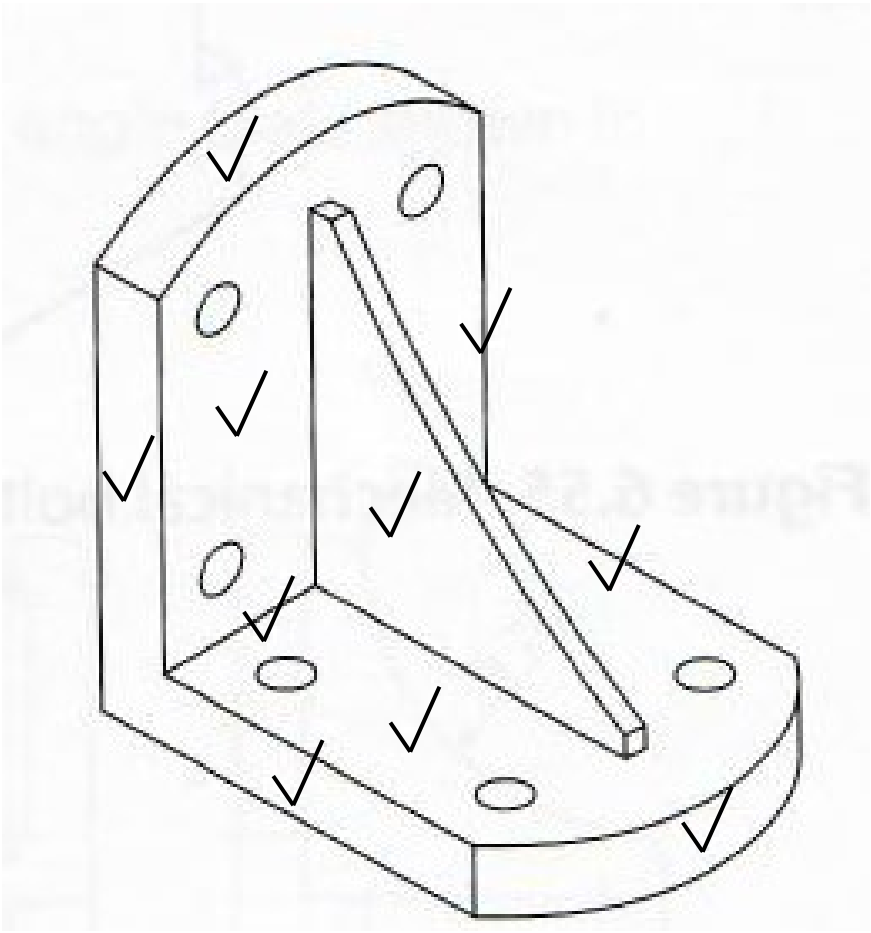
QUESTION 2

2.1
2.1.1 I
2.1.2 C
2.1.3 B
2.1.4 E
2.1.5 D
2.1.6 F
2.1.7 H
2.1.8 J
2.1.9 A
2.1.10 K

(10 × 1) (10)

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2.2



Markers should use their own discretion. (10)
[20]

QUESTION 3

3.1 3.1.1 False – Plotters, copiers and printers must be placed where everybody can access them fairly easily.

3.1.2 False – Maintenance of general office equipment should be done by a qualified person.

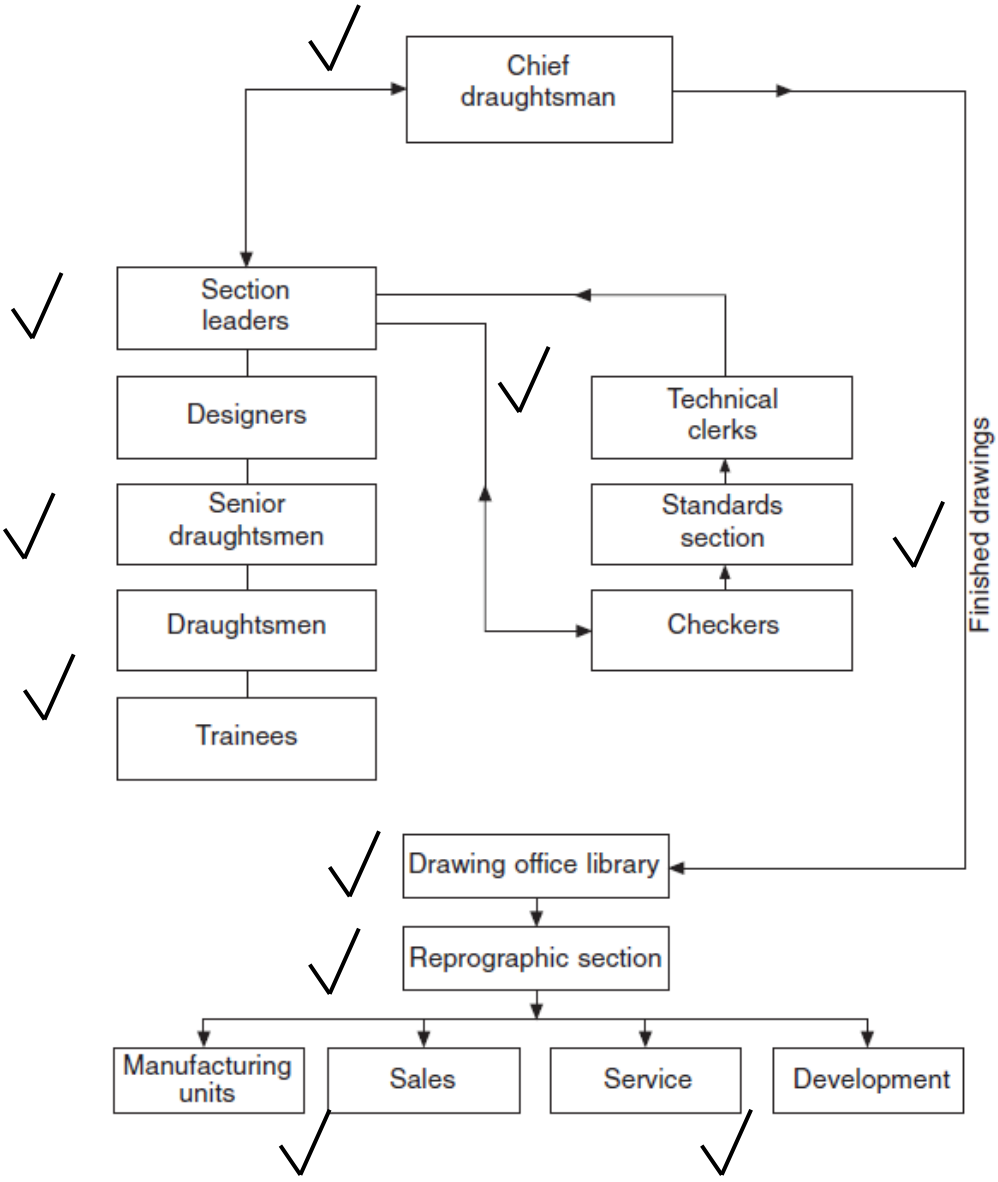
3.1.3 True – It saves time, the expense of tracing and the checking of the tracing.

3.1.4 False – A technical report is not an expression of an opinion or a summary of known information, but consists of detailed information, data and research.

3.1.5 False – Invented in 1842, blueprinting is the oldest method.

(5 × 1) (5)

3.2



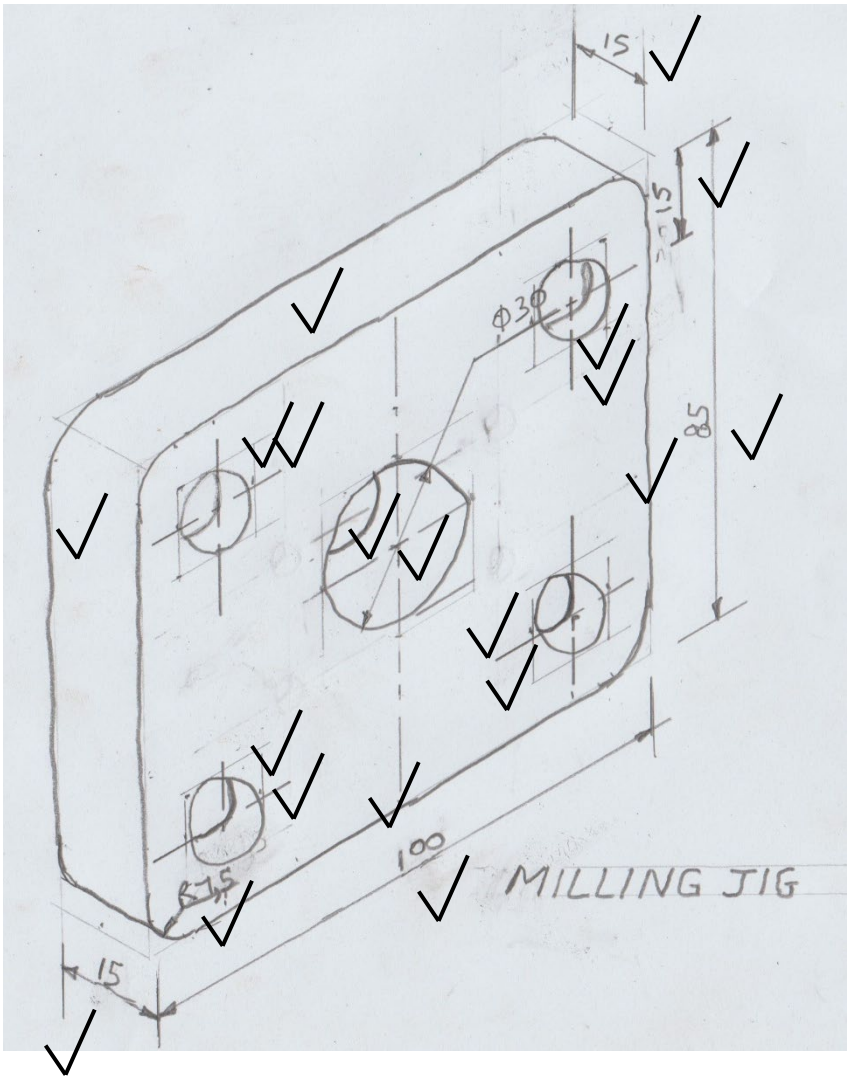
(10)

3.3
- Makes tracings, usually in ink, of original drawings.
- Inserts additional details when instructed.
- Sends drawings to the print room.
- Files drawings, tracings and copies of drawings when required. (Any 3 × 1) (3)

3.4
- Prepares detailed drawings of individual components, parts and sections.
- Inserts production guidance and general information on drawings, including items such as tolerances and surface finishes.
- Calculates detail dimensions.
- Prepares a parts list.
- Arranges the completed drawings to be checked, traced and reproduced for use as working drawings. (Any 3 × 1) (3)

[21]

QUESTION 4



Correct isometric angle and shape: 4 marks
Correct holes, size, shape with centre lines: 10 marks
Six dimensions shown correctly: 6 marks **[20]**

QUESTION 5

5.1	5.1.1	Metre
	5.1.2	Mass
	5.1.3	Second
	5.1.4	Electric Current
	5.1.5	Temperature
	5.1.6	Luminous Intensity
	5.1.7	Cd

(7 × 1) (7)

5.2	5.2.1	60° 51’		
	5.2.2	153° 23’		
	5.2.3	41° 40’		
	5.2.4	39° 29’		
	5.2.5	119° 37’		
	5.2.6	53° 50’		
			(6 × 1)	(6)
5.3	5.3.1	38° 13’		
	5.3.2	71° 55’		
	5.3.3	11° 19’		
	5.3.4	0° 06’		
	5.3.5	2° 53’		
	5.3.6	0° 59’		
			(6 × 1)	(6)
5.4	5.4.1	$1,23 \times 10^{-4}$		
	5.4.2	$4,32 \times 10^{-6}$		
	5.4.3	$8,99 \times 10^{-7}$		
	5.4.4	$1 \times 10^{-}1$		
	5.4.5	$9,9 \times 10^{-3}$		
	5.4.6	$5,43 \times 10^{-10}$		
			(6 × 1)	(6)
				[25]
			TOTAL:	**100**

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