higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

# MARKING GUIDELINE

## NATIONAL CERTIFICATE

## PRODUCTION AND QUALITY CONTROL N4

## 11 APRIL 2018

**This marking guideline consists of 5 pages.**

Copyright reserved

## SECTION A

## QUESTION 1

1.1 1.1.1 True
1.1.2 True
1.1.3 True
1.1.4 False
1.1.5 True
1.1.6 False
1.1.7 True
1.1.8 False
1.1.9 True
1.1.10 False
1.1.11 True
1.1.12 True
1.1.13 True
1.1.14 False
1.1.15 True

(15 × 1) (15)

1.2 1.2.1 It is the management function✓ that encompasses the purposeful consideration of future objectives✓ of an enterprise or part thereof.✓ (3)

1.2.2
- Job order or jobbing production
- Mass production
- Series or batch production (3)

1.2.3 Order costs are those costs which should be incurred in other to obtain inventory.✓ This include preparation✓ and revision of purchasing orders, monitoring of orders and costs related to reception,✓ inspection storage and payment for goods.✓ (4)

**[25]**

**TOTAL SECTION A: 25**

## SECTION B

## QUESTION 2

2.1
- The work that must be done that day
- By whom it must be done
- What resources are necessary to do it
- When it must be done
- Where it must be done
- How it must be done (6)

2.2
- Management
- Information
- Technology
- Capital
- Land
- Labour
- Energy
- Raw materials
- Components
- Documents
- Persons (e.g. patients)
- Environmental influence (Any 10 × 1) (10)

2.3
- Record accounting information
- Establish clerical organisation, procedures and methods
- Plan the utilisation of office space
- Undertake wage calculation
- Attend to correspondence (Any 4 × 1) (4)

2.4
2.4.1 E
2.4.2 D
2.4.3 A
2.4.4 B
2.4.5 C

(5 × 1) (5)
**[25]**

**TOTAL SECTION B: 25**

## SECTION C

## QUESTION 3

3.1
- The starting inventory at the beginning of the planning period
- A forecast of orders in a short term
- The number of confirmed orders received from customers
- The batch size in which the products are produced
- The MPS rule, which specifies how much safety sock must be kept (5)

3.2

| | | Feb | Mar | Apr | May | June |
|---|---|---|---|---|---|---|
| Orders | | 900 | 1 200 | 1 200 | 900 | 1 000 |
| Production | | ✓1 000 | ✓1 000 | ✓1 000 | ✓1 000 | ✓1 000 |
| Inventory | 500 | ✓600 | ✓400 | ✓200 | ✓300 | ✓300 |

(10)

3.3
- Planning priorities are clear
- Improve delivery performance
- Improve customer service and satisfaction
- Low cost
- Increase productivity
- Reduces lead time
- Reduces inventories
- Better quality of working life
- Fewer shortages of raw materials (Any 7 × 1) (7)

3.4
- Poor conditions of machines
- Lack of proper procedure
- Inadequate training
- Old or outdated equipment
- Poor quality of raw materials
- Poor working conditions
- Cluttered workspace (Any 3 × 1) (3)

**[25]**

**TOTAL SECTION C: 25**

## SECTION D

## QUESTION 4

4.1 A written plan✓ expressed in terms of the financial situation.✓ (2)

4.2 Specified tolerance range = (2% × 1 000) × 2✓

= 40 g✓

Machine 1 Cp $= \frac{40}{6x4.3}$✓

$= \frac{40}{25.8}$ ✓

= 1,55 therefore machine 1 is capable at 1,33 level✓

Machine 2 Cp $= \frac{40}{6x5.9}$ ✓

$= \frac{40}{35.4}$✓

= 1,3 therefore machine 2 is not capable at 1,33 level✓ (8)

4.3
- When raw materials and parts come in to an operation,✓ in order to avoid using defective raw materials or parts in the process✓
- When a particular part of a process is known✓ to produce poor quality products✓
- When finished goods leave an operation,✓ in order to avoid product returns, repairs, warranty claims, consequential damages, etc.✓
- Before a critical activity in the process,✓ e.g. before an expensive part of a process✓
- After an unreliable part of a process with a high defect rate,✓ in order to limit future consequences of poor quality✓ (5 × 2) (10)

4.4
- A well-defined objective or target
- An output standard
- A measuring mechanism
- A communication feedback signal
- A corrective action plan (5)

**[25]**

**TOTAL SECTION D: 25**
**GRAND TOTAL: 100**

Copyright reserved