higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

T1410(**E**)(A6)T

NATIONAL CERTIFICATE

PRODUCTION AND QUALITY CONTROL N4

(8140034)

6 August 2018 (X-Paper)
09:00–12:00

This question paper consists of 5 pages.

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DEPARTMENT OF HIGHER EDUCATION AND TRAINING
REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE
PRODUCTION AND QUALITY CONTROL N4
TIME: 3 HOURS
MARKS: 100

INSTRUCTIONS AND INFORMATION

1. Answer ALL the questions.
2. Read ALL the questions carefully.
3. Number the answers according to the numbering system used in this question paper.
4. ALL calculations must be clearly shown and the answers rounded off to TWO decimal places where appropriate.
5. Rule off across the page on completion of each section.
6. Write neatly and legibly.

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SECTION A

QUESTION 1

1.1 Indicate whether the following statements are TRUE or FALSE. Choose the answer and write only 'True' or 'False' next to the question number (1.1.1–1.1.15) in the ANSWER BOOK.

1.1.1 The process of estimating future market demand for a company's products is known as forecasting.

1.1.2 The more variation there is in the delivery time, the higher the standard deviation.

1.1.3 If a work centre produces 120, 110, 120, 120 and 130 units a day, the demonstrated capacity of that centre over that 5-day period is 110 units per day.

1.1.4 The process of estimating future market demand for a company's products is known as forecasting.

1.1.5 Quality involves doing the right things right, first time, every time.

1.1.6 Liquidation is the most unattractive strategy which can be used only when all other strategies fail.

1.1.7 In a quality costing programme, warranty costs should be captured as an example of internal failure costs.

1.1.8 The choice of a growth strategy is inevitably risky.

1.1.9 In master production scheduling, the time period during which changes to the schedule should be avoided is known as the demand-time fence.

1.1.10 By exploiting the strengths, top management cannot choose a strategy of growth through diversification.

1.1.11 When calculating economic order quantity (EOQ), the carrying cost of inventory is assumed to be constant.

1.1.12 The business plan, financial plan, marketing plan and production plan need to be closely linked and should support one another.

1.1.13 In an MRP system, the smaller the time bucket, the more precise the plan will be.

1.1.14 It is correct to think that planning is making a future decision.

1.1.15 The Delphi method is an extension of an expert in that a group of experts are used to make forecasts.

(15 × 1) (15)

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1.2 State SEVEN requirements for developing a successful business plan. (7)

1.3 State THREE functions of the production plan. (3)
[25]

TOTAL SECTION A: 25

SECTION B

QUESTION 2

2.1 State SIX ways in which manufacturing costs can be reduced without negatively affecting quality and productivity. (6)

2.2 The output of a system in any enterprise may for instance constitute finished products or services.

Name FIFTEEN of these products or services. (15)

2.3 State FOUR advantages of having raw materials delivered to a work centre when needed. (4)
[25]

TOTAL SECTION B: 25

SECTION C

QUESTION 3

3.1 State FIVE characteristics or patterns that may occur that would require corrective action. (5)

3.2 State SEVEN characteristics of world-class companies. (7)

3.3 Draw a diagram/freehand sketch of the various levels of strategic planning. (13)
[25]

TOTAL SECTION C: 25

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SECTION D

QUESTION 4

4.1 Draw diagrams to show the difference between *horizontal dependency* and *vertical dependency.* (2 × 3) (6)

4.2 State 10 benefits of making use of MRP (material requirements planning). (10)

4.3 4.3.1 Differentiate between *supplying ex-stock* and *make-to-order*. (3)

4.3.2 Give TWO advantages and TWO disadvantages of *ex-stock.* (2 × 2) (4)

4.3.3 Give ONE advantage and ONE disadvantage of *make-to-order*. (2 × 1) (2)

[25]

TOTAL SECTION D: 25
GRAND TOTAL: 100

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