higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE

PRODUCTION AND QUALITY CONTROL N6

(8140066)

1 April 2021 (X-paper)
09:00–12:00

Nonprogrammable calculators may be used.

This question paper consists of 4 pages.

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DEPARTMENT OF HIGHER EDUCATION AND TRAINING
REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE
PRODUCTION AND QUALITY CONTROL N6
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. Start each question on a new page.
5. Use only a black or blue pen.
6. Write neatly and legibly.

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QUESTION 1

Complete the following sentences by writing only the missing word or words next to the question number (1.1–1.10) in the ANSWER BOOK.

1.1 The three main features that dominate the marketing function in all sophisticated market economies comprise the market orientation, market research and …

1.2 Close liaison between the accountant and the … is essential to obtain a good balance between optimum inventory sizes and optimum production batches.

1.3 … concerns manufacturing small quantities of a large variety of products.

1.4 The extent to which a/an … or … meets the required standards or specifications as prescribed by the manufacturing or service organisation with due allowance for the consumer's expectations.

1.5 Quality control is mainly aimed at prevention rather than …

1.6 … is sometimes said to have been invented by Henry Ford because of his one-at-a-time assembly line circa 1913.

1.7 … can be applied outside the boundaries of the organisation, reaching backwards and forwards in the supply chain to reduce inventories, improve throughput and increase responsiveness to changing customer needs.

1.8 Whether … or …, measurement systems dictate the way that people act. The best example of this is the concept of staying busy.

1.9 … is the most popular form of control and concentrates on completed enterprise achievements.

1.10 Any situation with … between standards laid down and actual performance, demands the correction of actual performance or the modification of standards.

(10 × 2) **[20]**

QUESTION 2

2.1 Name FIVE of the most important contingency factors that can influence the control process. (5)

2.2 List FIVE elements that form the foundation for implementing the logistics or flow-oriented concepts of TOC management. (5)

2.3 Give FIVE qualities of a properly implemented JIT system. (5)

2.4 Define the term *capacity*. (3)

2.5 List SEVEN basic tools of quality. (7)

[25]

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QUESTION 3

3.1 State FOUR functions of a budget. (4)

3.2 Name and explain THREE types of budgets used in companies. (3 × 2) (6)

3.3 Briefly explain the term brainstorming and state THREE good practices associated with this technique. (2 + 3) (5)

3.4 Differentiate between *continuous improvement* and *business process reengineering*. (5)

[20]

QUESTION 4

4.1 Name THREE types of production processes. (3)

4.2 State the SEVEN criteria categories used to judge organisations. (7)

4.3 Name FOUR common types of waste in a manufacturing company and give FOUR steps to reduce these problems. (4 + 4) (8)

4.4 Differentiate between *internal setup activities* and *external setup activities* and give TWO examples of each. (3 + 3) (6)

[24]

QUESTION 5

5.1 State FIVE key principles of the just-in-time (JIT) manufacturing strategy. (5)

5.2 A company produces 50 products daily and sells it for R200 each.

5.2.1 Calculate the daily throughput if the material cost is R80 per unit. (3)

5.2.2 How will the throughput be affected if 10% of the products are rejected at final inspection and cannot be sold? (3)

[11]

TOTAL: 100

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