higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

MARKING GUIDELINE

NATIONAL CERTIFICATE

PRODUCTION AND QUALITY CONTROL N4

16 April 2020

This marking guideline consists of 5 pages.

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QUESTION 1

1.1 True
1.2 True
1.3 False
1.4 True
1.5 False

(5 × 2) **[10]**

QUESTION 2

2.1 E
2.2 C
2.3 A
2.4 B
2.5 G

(5 × 1) **[5]**

QUESTION 3

3.1 3.1.1 Top management plans for the enterprise as a whole. This is known as strategic planning.✓ A large part of top management's time should be spent on planning.✓ Top management is responsible for carrying out strategic planning. It plans within the framework of risks and uncertainties brought about by the external environment.✓ The results of the plans made by the management are only seen in the long term.✓ The planning done serves as a guideline for planning that must be done by middle and first-line management.✓ (5)

3.1.2 Middle management is responsible for planning of activities of the different functional areas.✓ Within the framework of the long-term planning done by the top-management, middle management must set up medium and short-term plans which will lead to the achievement of the enterprise's objectives and goals.✓✓ Middle management plans within an environment which has less uncertainties and risks than the environment in which top managements plan.✓ Middle management provides guidelines for first-line management according to which more comprehensive short-term plans must be made.✓ (5)

3.1.3 First-line management is responsible for planning daily activities, which is, operational or tactical planning. On this level detailed, short-term planning is done.✓

First-line management planning is done within the framework established by the top and middle management.✓ The goals and objectives of the enterprise and the different functional decision-making areas are formulated by top and middle management.✓

First-line management must draw up detailed plans that will make the achievement of the set aims and objectives possible. While making and carrying out short-term plans first-line management must ensure that the detailed plan agrees within the policy, procedures, rules, regulations and methods.✓ Planning done by first-line management is less complicated, less comprehensive, less uncertain and less risky.✓ (5)

3.2
- Men
- Machines
- Methods
- Materials
- Money (5)

3.3
- General management function
- Administrative function
- Marketing function
- Purchasing function/production function
- Financial function
- Personnel function
- External relations function (7)

3.4
- Market orientation
- Market research
- Marketing management (3)

[30]

QUESTION 4

4.1
- Design
- Supply
- Process
- Distribution
- Use (5)

4.2 Attribute data: information that is counted in whole numbers,✓ such as the number of defects in a product or the number of complaints received about a service.✓ Sometimes attribute data is dichotomous in that there are only two categories: for example Yes/No; or Passed/Failed; inspection.✓ Other attribute data can have more categories: for instance, at final inspection goods may be classified into three categories such as Good for sale, Repairable, or Scrap.✓

Variable data: information that is measured on a continuous scale.✓✓ This means that the numbers can include fractions or decimal parts of a number and include measures such as length, weight, time, etc.✓✓ (8)

4.3

		Feb	**Mar**	**Apr**	**May**	**June**
Orders		950	1 100	1 100	800	1 000
Production		1 000✓	1 000✓	1 000✓	1 000✓	1 000✓
Inventory	600	650✓	550✓	450✓	650✓	650✓

(10)

4.4
- Clear priorities in planning
- Improve performance delivery
- Improve customer service and satisfaction
- Low cost
- Increase productivity
- Reduces lead time
- Reduces inventories
- Better quality of working life (Any 7 × 1) (7)

[30]

QUESTION 5

5.1 5.1.1 Qualitative forecasts are subjective when they are based on the opinions of individuals or groups of people.✓✓

5.1.2 Quantitative forecasts are objective because they are derived from mathematical calculations based on known numerical data.✓✓

(2 × 2) (4)

5.2 Step 1: Number the seasons into periods.

Step 2: Calculate the trend point on the trend line for every season.

Step 3: Compare the actual data with the trend data.

Step 4: Average the seasonal factors.

Step 5: Extending the trend line.

Step 6: Applying the seasonal factor. (6)

5.3 Solution

F1 + 1 = F1 + α(Dt – F1)✓
FJuly = FJune✓ + α(DJune – FJune)✓
FJul = 749✓ + 0.18✓ (776 – 749)✓
= 749 + 0.18(27)✓
= 749 + 4.86✓
= 758.18 or round up to✓
= 758 Units✓ (10)

5.4
- Record accounting information
- Establish clerical organisation, procedures and methods
- Plan the utilisation of office space
- Undertake wage calculation
- Attend to correspondence
- Collect and process statistic
- Undertake cost price calculations and cost control
- Draw up and control budgets
- Communicate with other departments (Any 5 × 1) (5)

[25]

TOTAL: 100

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