higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE (VOCATIONAL)

CONSTRUCTION SUPERVISION
NQF LEVEL 4

(12010474)

3 December 2020 (X-paper)
09:00–12:00

This question paper consists of 7 pages.

249Q1N2003

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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 section on a new page.
5. Use only a black or blue pen.
6. Write neatly and legibly.

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QUESTION 1: SUPERVISION AND MOTIVATION

1.1 Various options are given as possible answers to the following questions. Choose the correct answers and write only the letter (A–D) next to the question number (1.1.1–1.1.10) in the ANSWER BOOK.

1.1.1 The … is the person who commissions the construction project.

A buyer
B architect
C principal contractor
D client

1.1.2 … relates to the setting of goals and converting them into a specific plan.

A Leading
B Organising
C Planning
D Controlling

1.1.3 A supervisor's main functions include:

A Capping cost
B Health
C Ordering of material
C Promotion

1.1.4 Motivational factors include:

A Pay and benefits
B Job security
C Leave
D Work itself

1.1.5 A … organises the activities of different trades people on site.

A project manager
B quantity surveyor
C site supervisor
D principal contractor

1.1.6 A/An… oversees the distribution of correspondence, notices, and payment of relevant taxes.

A office assistant
B quantity surveyor
C client
D office manager

1.1.7 The … does not form part of the designing team.

A plumbing engineer
B architect
C electrical engineer
D structural engineer

1.1.8 … is not a quality of a supervisor that is needed

A Extensive experience
B Good looks
C Good state of health
D Good educational background

1.1.9 … will not increase motivation on site.

A Redesigning jobs
B Regular meetings
C Feedback
D Promotions

1.1.10 … does not form part of Maslow's hierarchy of needs.

A Communication skills
B Esteem
C Social
D Safety

(10 × 1) (10)

1.2 List FOUR activities that are normally performed by unskilled labourers on site. (4)

1.3 NHBRC, MBSA and CIDB are some of the professional organisations that regulate and monitor the construction industry.

Write the following abbreviations in full:

1.3.1 NHBRC

1.3.2 MBSA

1.3.3 CIDB

(3 × 2) (6)
[20]

QUESTION 2: QUALITY CHECKS

2.1 Define the following terms:

2.1.1 Quality

2.1.2 Inspection

(2 × 2) (4)

2.2 List SIX functions performed by the resident engineer on a construction site. (6)

[10]

QUESTION 3: SAFETY CONTROLS

3.1 It is every employee's responsibility to take care of his/her own safety as well as the safety of others in the workplace.

List FOUR points to be taken into consideration while working on a construction site. (4)

3.2 What is the purpose of a reserve first aid provider at the site? (2)

3.3 Explain the role SABS plays within the construction industry. (2)

3.4 Name TWO factors that may lead to rework/redo of work on a construction project. (2)

[10]

QUESTION 4: PROJECT MANAGEMENT, COSTS AND PRODUCTIVITY

4.1 Name FOUR on site meetings that can be held. (4)

4.2 List SIX factors that can affect productivity. (6)

4.3 Name the leadership style each of the listed activities below belong to. Write only the correct answer next to the question number (4.3.1–4.3.5) in the ANSWER BOOK.

4.3.1 All decision-making processes are handled by the leader.

4.3.2 Decision-making processes are made collectively by the group.

4.3.3 No specific leadership, and the group is entirely left on its own.

4.3.4 Manager remains uninvolved in most situations.

4.3.5 Encourages the sharing of ideas.

(5 × 1) (5)

4.4 Read the given table on cost control and then answer questions. Write only the answer next to the question numbers (4.4.1–4.4.5) in the ANSWER BOOK.

RELIABLE BUILDERS CONSTRUCTION (PTY) LTD

Weekly cost control sheet

Construction site: N4 GATEWAY HOUSING PROJECT

Supervisor: D.D Naidoo

Contractor: B.S Nkomo

Activity	Budget amount	Total hours	Overtime payment	Plant cost	Labour cost	Total cost	Profit/ loss
Site clearing	5 500	15	250	1 000	750	2 000	3 500
Crane	1 250	10	150	500	350	1 000	250
Bulldozer	1 900	15	300	850	550	1700	200

4.4.1 How much was spent on the plant for this project?

4.4.2 Which activity resulted in a loss?

4.4.3 Who compiled this weekly cost control sheet?

4.4.4 What is the overall profit made by the contractor on this project?

4.4.5 How much money was budgeted for this project?

(5 × 1) (5)
[20]

QUESTION 5: LABOUR RELATIONS AND LEGISLATION

5.1 Wrong word choice or addressing the wrong target group are some of the typical examples of communication barriers around the construction site.

List SIX other communication barriers that may be experienced on the construction site. (6)

5.2 Outline THREE objectives and functions of a workplace forum. (3)

5.3 Discuss the following aspects as outlined in terms of the Basic Conditions of Employment Act:

5.3.1 Annual leave

5.3.2 Sick leave

5.3.3 Maternity leave

(3 × 2) (6)

[15]

QUESTION 6: DISCIPLINE AND CONFLICT MANAGEMENT

6.1 Explain the importance of maintaining discipline in an organisation. (3)

6.2 Verbal warnings and written warnings are disciplinary steps to take for various offences.

Outline FOUR other steps that can be taken for offences. (4)

6.3 State FIVE characteristics of constructive conflicts. (5)

6.4 Name THREE work situations that show the supervisor is leading by example. (3)

[15]

QUESTION 7: RECORD KEEPING AND ADMINISTRATION

7.1 Name and explain THREE reasons for recording information on the construction site. (3 × 2) (6)

7.2 List FOUR tools that can be recorded in the small tool register on site. (4)

[10]

TOTAL: 100

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