higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

# NATIONAL CERTIFICATE (VOCATIONAL)

# CONSTRUCTION PLANNING
## NQF LEVEL 4

(12010464)

**15 November 2024 (X-paper)**
**09:00–12:00**

**Calculators may be used.**

**This question paper consists of 6 pages.**

197Q1N2415

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# DEPARTMENT OF HIGHER EDUCATION AND TRAINING
# REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE (VOCATIONAL)
CONSTRUCTION PLANNING
NQF LEVEL 4
TIME: 3 HOURS
MARKS: 100

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**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. Use only a black or blue pen.
5. Write neatly and legibly.

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## QUESTION 1: INTRODUCTION TO CONSTRUCTION CONTRACTS.

1.1 Name any FIVE consultants that will form part of the professional team at the start of a construction project. (5)

1.2 The importance of reducing construction contracts to writing is critical for the proper execution of the contract.

State any FOUR reasons why the above is so important. (4)

1.3 Define the following terminology as used in level 4 of construction planning:

1.3.1 Interim payments

1.3.2 Retention money

(2 × 2) (4)

1.4 List TWO important activities during the preparation and handover of the final account. (2)

**[15]**

## QUESTION 2: BASIC COMMON AND COMMERCIAL LAW

2.1 The law states that a neighbour's property may not be negatively affected by any construction processes and structures that might be built on the incorrect site.

Explain the rights that a landowner has if somebody has built a structure on the incorrect site. (4)

2.2 Indicate whether the following statements are TRUE or FALSE by writing only 'True' or 'False' next to the question number (2.2.1–2.2.6) in the ANSWER BOOK.

2.2.1 Excavation is the action of making a channel.

2.2.2 A builder's lien is the most powerful tool a contractor has to ensure that the claim for payment is secured.

2.2.3 Common law comes from custom and previous judgements.

2.2.4 The builder's lien does not allow the contractor to keep possession of the site if he/she is not paid for the work done.

2.2.5 An implied term is one that is not specifically stated.

2.2.6 Lateral support means to hold back the bottom of an excavation.

(6 × 1) (6)

**[10]**

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## QUESTION 3: STANDARD CONSTRUCTION CONTRACTS

3.1 The Standard condition of contract identifies specific general rights of the main contractor.

(4)

List any FOUR of these general rights to protect the main contractor.

3.2 Choose ONE term from the list below for each of the following descriptions and write it next to the question (3.2.1–3.2.3) in the ANSWER BOOK.

| |
|---|
| subcontractor; variation orders; nominated subcontractor; GCC; CIDB document; main contractor; FIDIC |

3.2.1 The contractor that has been selected by the client.

3.2.2 The contractor that signs a contract with main the contractor.

3.2.3 A subcontractor that is chosen by the architect.

(3 × 1) (3)

3.3 Name THREE methods of recording progress of work on site. (3)

**[10]**

## QUESTION 4: TENDERS AND QUOTES

4.1 There are different types of tenders that can be used to obtain a construction project.

Briefly explain the following types of tenders from (4.1.1–4.1.5) in the ANSWER BOOK.

4.1.1 Labour only contracts

4.1.2 Open advertised tender

4.1.3 Restricted tenders

4.1.4 Day works contracts

4.1.5 Lump sum contracts

(5 × 2) (10)

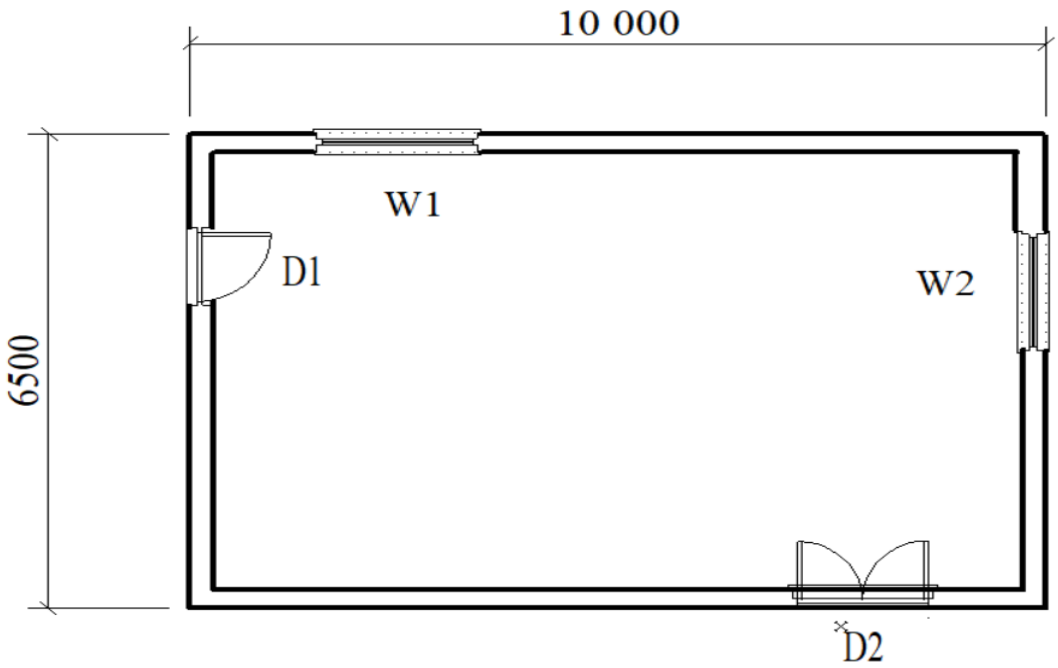
4.2 Describe the importance of drawing up a proper tender document. (4)

4.3 Expand the abbreviation *VAT.* (1)

**[15]**

## QUESTION 5: QUANTITIES AND COSTING

Study the given floor plan and specifications of a new warehouse and answer the questions.




SPECIFICATIONS:

- Superstructure: 220 mm double leaf walls.
- Door D1: 900 mm × 2 100 mm
- Door D2: 1 800 mm × 2 100 mm
- Window W1: 1800mm x 1200
- Window W2: 1400mm x 1400
- Floor area cement screed 30 mm thick
- For the calculation of the number of bricks, use 110 bricks per m² for a 220 mm (double leaf) solid wall.

5.1 How many windows will be required to complete the building? (1)

5.2 How many door openings are shown on the above plan? (1)

5.3 Calculate the external perimeter of the 220 mm wall. (3)

5.4 Calculate the total area of all the deductions for brickwork for all doors and windows shown on the plan. (12)

5.5 From the total area of all deductions in QUESTION 5.4, calculate the number of bricks that will be replaced by all the windows and doors. Round off to next whole brick. (3)

**[20]**

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## QUESTION 6: PLANNING AND ORGANISING CONSTRUCTION ACTIVITIES

6.1 Explain the difference between *critical activity* and *non-critical activity*. (4)

6.2 List FIVE activities that take place during each of the following phases of a construction project:

6.2.1 Site establishment

6.2.2 Roof construction

6.2.3 Superstructure

(5 × 3) (15)

6.3 Will landscaping the garden be a critical or non-critical activity? (1)
**[20]**

## QUESTION 7: PROJECTIONS AND CASH FLOW

7.1 Discuss FIVE ways in which a contractor can manage cash-flow shortages of a small business. (5)

7.2 State any FIVE main advantages of fast tracking a project. (5)
**[10]**

**TOTAL: 100**

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