



**higher education
& training**

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

**NATIONAL CERTIFICATE
QUANTITY SURVEYING N4**

(2050004)

**13 August 2021 (X-paper)
09:00–13:00**

REQUIREMENTS: Dimension paper (OE 8/12)
Abstract paper (OE 8/10)
Billing paper (OE 8/11)

**Candidates are NOT allowed to use the Standard System of Measuring Building Work.
Calculators may be used.**

This question paper consists of 6 pages and 1 addendum.

317Q1G2113

DEPARTMENT OF HIGHER EDUCATION AND TRAINING
REPUBLIC OF SOUTH AFRICA
NATIONAL CERTIFICATE
QUANTITY SURVEYING N4
TIME: 4 HOURS
MARKS: 100

INSTRUCTIONS AND INFORMATION

1. Answer all the questions.
 2. SECTION A must be answered on the prescribed sheets provided.
 3. SECTION B must be answered in the ANSWER BOOK.
 4. Read all the questions carefully.
 5. Number the answers according to the numbering system used in this question paper.
 6. The use of Tippex is not allowed.
 7. Start each section on a new page.
 8. Only use a black or blue pen.
 9. Write neatly and legibly.
-

SECTION A

QUESTION 1

The ADDENDUM (attached) shows the plan view of a dwelling as well as a vertical section through the eave and half of the full truss. 

SPECIFICATIONS:

- | | |
|------------------------|--|
| Carpentry and joinery: | <ul style="list-style-type: none"> • 114 × 38 mm timber wall plate treated with carbolineum. • All timbers are sawn South African pine. • Nailed trusses fixed at 1,2 m centres.  • 114 × 38 mm timbers in roof trusses. • 76 × 50 mm purlins. • 200 × 38 mm timber fascia. |
| Roof covering: | <ul style="list-style-type: none"> • Fibre cement corrugated sheets with standard ridge capping. • 200 mm × 200 mm barge capping. • 200 mm gable overhang. |
| Plumbing and drainage: | <ul style="list-style-type: none"> • 100 mm × 75 mm rectangular plastic gutter. • 100 mm × 75 mm rectangular plastic outlets. • Plastic gutter stopped ends. • 75 mm × 75 mm plastic down pipe, 2,4 m long. • 75 mm × 75 mm swan neck, 600 mm long. • 75 mm × 75 mm shoe, 150 mm long. |

- | | | |
|-----|---|-------------|
| 1.1 | Draw up a measuring list of all the work to be done for this roof construction and the rainwater goods.  | (5) |
| 1.2 | Take off the items for the timber wall plate. | (5) |
| 1.3 | Take off the roof trusses and the roof covering. | (14) |
| 1.4 | Take off the rainwater goods. | (6) |
| | | [30] |

QUESTION 2

Do the working up process for the plumbing and drainage trade.

- | | | |
|-----|--|-------------|
| 2.1 | Squaring  | (3) |
| 2.2 | Abstracting | (3) |
| 2.3 | Billing | (4) |
| | | [10] |

TOTAL SECTION A: 40

SECTION B**QUESTION 3**

3.1 Write the following abbreviations in full.

3.1.1 l.c.p.

3.1.2 C.s.g. 

3.1.3 R.o.c.

3.1.4 E.o.

3.1.5 F.bk.

(5 × 1) (5)

3.2 State the unit of measure of the following trade items:

3.2.1 Beam filling 

3.2.2 Concrete

3.2.3 Roofing sheets

3.2.4 Purlins 

3.2.5 Risk of water

(5 × 1) (5)
[10]

QUESTION 4

Explain the following quantity surveying terms:

4.1 Labour only

4.2 Extra over 

4.3 Purpose made

4.4 Measured net

4.5 Signposting

(5 × 2) **[10]**

QUESTION 5

List the working up actions to be done in the process of:

5.1 Squaring



5.2 Abstracting

(2 × 5) [10]

QUESTION 6

Indicate whether the following statements are TRUE or FALSE. Choose the answer and write only 'True' or 'False' next to the question number (6.1–6.10) in the ANSWER BOOK.

6.1 Excavations for surface trenches are measured in cubic metre.

6.2 Beam filling must be measured in square metre.

6.3 Fabricated roof trusses are made on site.



6.4 Site instructions are issued to the contractor by the architect.

6.5 The architect draws up the draft interim valuations.

6.6 Mass brickwork shall be measured in square metre.

6.7 Contingencies in the bills of quantities are part of the tender amount.

6.8 Interim payment certificates are issued by the quantity surveyor.

6.9 Monthly payments are paid to the contractor by the client.



6.10 Preambles are specification notes in the bills of quantities.

(10 × 1) [10]

QUESTION 7

Briefly explain the difference between the following quantity surveying terms:

7.1 Provisional sums



(4)

7.2 Prime cost sums

(4)

7.3 Contingencies

(2)

[10]

QUESTION 8

A cubic metre of grade 20 concrete consists of 600 kg of cement, 1,3 m³ of sand and 1,7 m³ of stone.



Calculate the total cost of 16 m³ concrete if the prices are as follows:

Cement: R105 per 50 kg bag



Sand: R350 per m³

Stone: R400 per m³

[10]

TOTAL SECTION B:	60
GRAND TOTAL:	100

ADDENDUM

