higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

T1440**(E)**(A14)T

NATIONAL CERTIFICATE

QUANTITY SURVEYING N4

(2050004)

14 August 2019 (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.

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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. Read ALL the questions carefully.
3. Number the answers according to the numbering system used in this question paper.
4. Sketches must be large, neat and fully labelled.
5. SECTION A must be done on the appropriate sheets provided.
6. SECTION B must be done in the ANSWER BOOK.
7. Do not use RED or GREEN ink.
8. The use of tippex is NOT allowed.
9. Write neatly and legibly.

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SECTION A

QUESTION 1

The ADDENDUM (attached) shows the plan view and a vertical section through the roof construction of the Van Wyk house.

Take off all the work as required below from the level underside of the wall plate to the apex of the roof covering.

SPECIFICATIONS

Masonry:
- Ordinary bricks
- External facings
- 1:3 cement mortar

Carpentry and joinery:
- 38 × 114 mm timber wall plate treated with carbolinium oil
- All timbers are sawn South African pine
- Nailed trusses fixed at 1,2 metre centres
- 38 × 114 mm timbers in roof trusses
- 50 × 76 mm purlins
- 38 × 200 mm timber fascia

Roof covering:
- Fibre cement sheets with standard ridge capping
- 200 × 200 mm barge capping
- 200 mm gable overhang

1.1 Take off:

1.1.1 The 220 mm thick brick wall in the gables (3)

1.1.2 The 110 mm thick brickwork in the beam filling (2)

1.1.3 Facings in gables and beam filling (4)

1.2 Take off:

1.2.1 The timber wall plate

1.2.2 The treatment to the wall plate (2 × 2) (4)

1.3 1.3.1 Calculate the number of trusses required. (1)

1.3.2 Take off the timber trusses. (6)

1.3.3 Take off the timber purlins. (2)

1.3.4 Take off the timber fascia board. (1)

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1.4 1.4.1 Take off the roof covering. (3)

1.4.2 Take off the ridge capping, barge boards and stopped ends. (4)
[30]

QUESTION 2

Prepare a tender document for the roof covering trade only:

2.1 Squaring (2½)

2.2 Abstracting (3½)

2.3 Billing (4)
[10]

TOTAL SECTION A: 40

SECTION B

QUESTION 3

State what is meant by the following lists in quantity surveying:

3.1 Taking off list

3.2 Measuring list

3.3 Query list

3.4 Tender list

3.5 Tender drawing list

(5 × 2) **[10]**

QUESTION 4

State the working up actions to be done when you are:

4.1 Squaring the items measured

4.2 Abstracting the squared items

(2 × 5) **[10]**

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QUESTION 5

5.1 Write the following abbreviations in full:

5.1.1 a.u.

5.1.2 exce.

5.1.3 r.w.p.

5.1.4 d.p.c.

5.1.5 s.o. & c.

(5 × 1) (5)

5.2 Name the principles laid down by the Standard System of Builder's Work for the carting away excavated soil from a site. (5)
[10]

QUESTION 6

6.1 State the format in which the bills of quantities must be set out. (5)

6.2 In what sequence must dimensions be inserted when taking off? (3)

6.3 Explain the term *fractional quantities*. (2)
[10]

QUESTION 7

7.1 Briefly explain what is meant by:

7.1.1 Precontract duties of a quantity surveyor

7.1.2 Post-contract duties of a quantity surveyor

(2 × 2) (4)

7.2 State THREE precontract duties of a quantity surveyor. (3)

7.3 State THREE post-contract duties of a quantity surveyor. (3)
[10]

QUESTION 8

Draw a neat, front view sketch of a timber casement window frame indicating the following members clearly:

Head, stile, mullion, sill and transom. (5 × 2) **[10]**

TOTAL SECTION B: 60
GRAND TOTAL: 100

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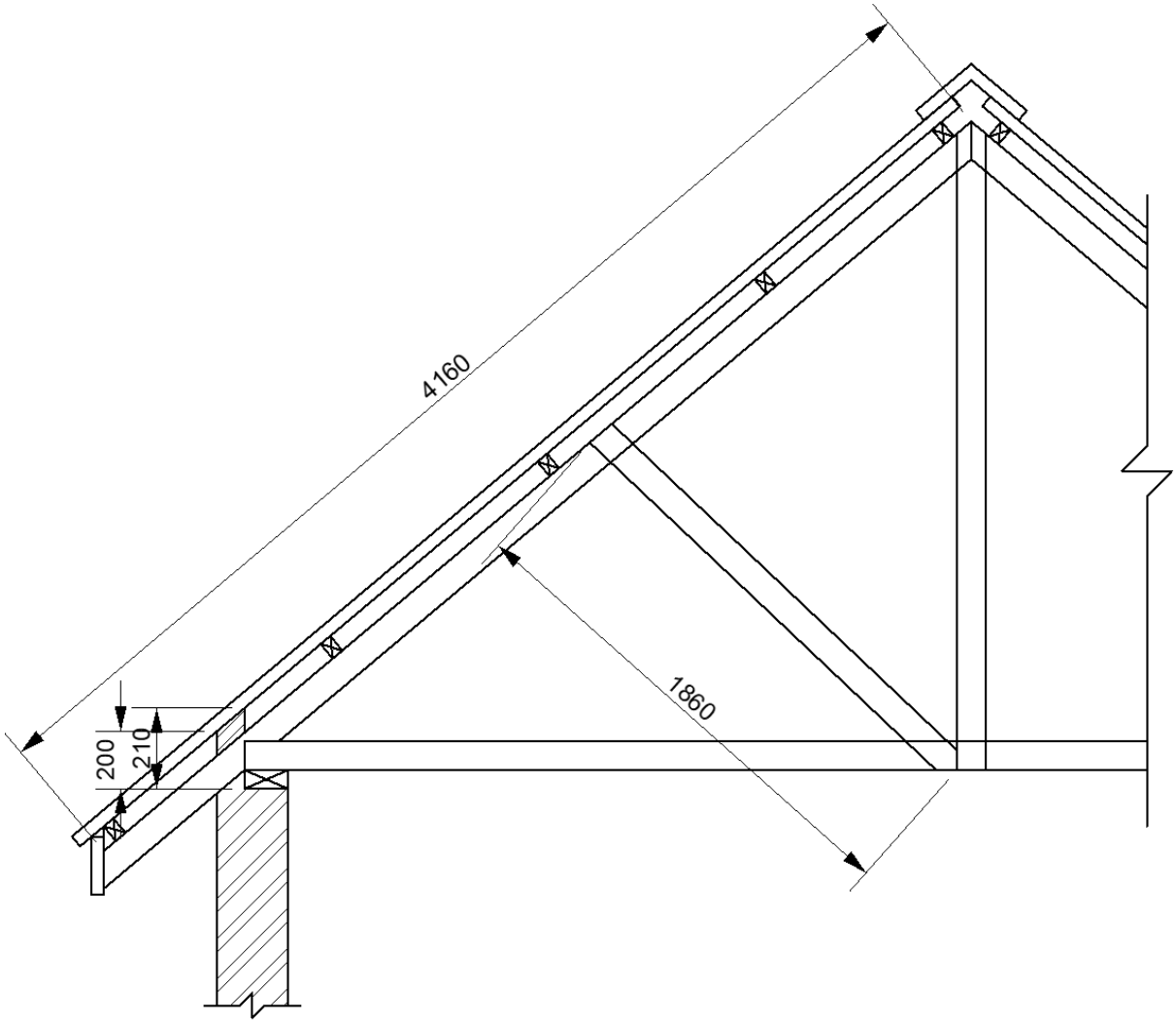
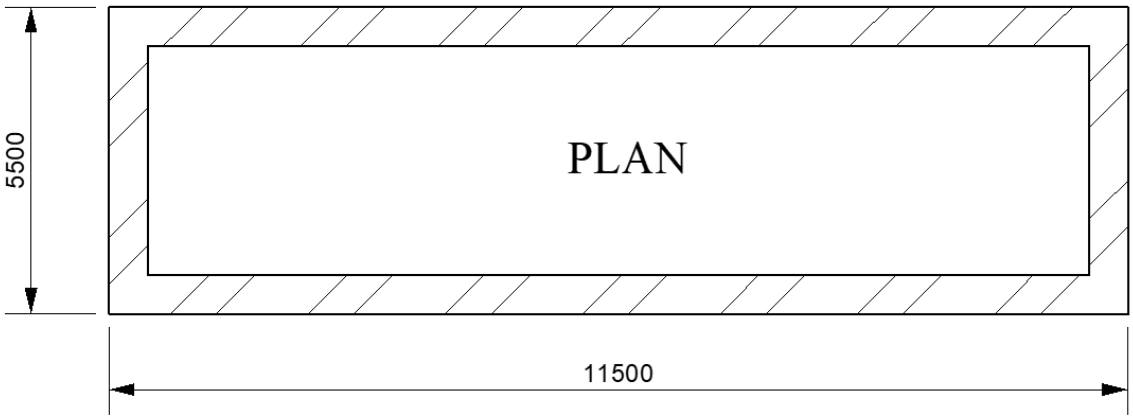
ADDENDUM





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