higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE

QUANTITY SURVEYING N4

(2050004)

23 April 2021 (X-paper)
09:00–13:00

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

Calculators and an unmarked copy of the Standard System of Measuring Building Work may be used.

This question paper consists of 5 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. Start each section on a new page.
5. Use only a black or blue pen.
6. The use of Tippex is not allowed
7. Write neatly and legibly.

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SECTION A

QUESTION 1

The plan view and a vertical section through the plain opening of a garden shed is shown on the ADDENDUM (attached). The external walls in the super structure are 220 mm thick. The plain opening has a 220 x 150 mm in-situ concrete lintel built over the opening. The bearing distance is 200 mm.

SPECIFICATIONS:

Concrete, formwork and reinforcement:	- 15 Mpa - Formwork in concrete lintel. - R1 500,00 provisional sum for steel rod reinforcement.
Brickwork:	- Ordinary stock bricks in 1:3 cement mortar mix. - Facings externally.
Plastering:	- 19 mm thick plaster internally and in reveals of the plain opening.
Painting:	- Two coats acrylic PVA paint on plaster surfaces.

Measure all the work in the superstructure strictly according to the list given below:

NOTE: For calculating purposes, assume that the measurements given on the drawing are the same distance from the floor and ground level.

1.1 Super structure brick walls and external facings. (7)

1.2 Internal finishes in super structure. (5)

1.3 The plain opening and the adjustments to the finishes. (18)
[30]

QUESTION 2

Use the appropriate papers provided and do the working up of only the masonry trade:

2.1 Squaring (3)

2.2 Abstracting (3)

2.3 Billing (4)
[10]

TOTAL SECTION A: 40

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SECTION B

QUESTION 3

Give ONE term for each of the following descriptions by writing only the description next to the question number (3.1–3.10) in the ANSWER BOOK.

3.1 A document issued by the architect certifying payment to the contractor.

3.2 A first layer of paint on new wood or metal to ensure a good surface for the final layers.

3.3 Monthly payments to the contractor.

3.4 An article of specific design or material and to a specific specification.

3.5 A percentage of money retained monthly to repair defects that may arise.

3.6 Written instruction issued by the architect to the contractor.

3.7 The document prepared by the quantity surveyor for tender purposes.

3.8 Allowances made during excavations for the placing and removal of formwork.

3.9 Reference notes made by the measurer during 'taking off'.

3.10 Gathering similar items

(10 × 1) **[10]**

QUESTION 4

4.1 Briefly explain why the 'taker off' uses abbreviations when measuring, but not in the bills of quantities. (3)

4.2 Write the following abbreviations in full:

4.2.1 A.u.

4.2.2 S.b.

4.2.3 C.s.

4.2.4 S.o.& c.

4.2.5 C.m.

4.2.6 W.s.

4.2.7 W

(7 × 1) (7)
[10]

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QUESTION 5

5.1 What is a quantity surveyor? (3)

5.2 Who appoints the quantity surveyor? (1)

5.3 What is the role of a quantity surveyor? (6)
[10]

QUESTION 6

Briefly explain the difference between the following quantity surveying terms:

6.1 Provisional sums (4)

6.2 Prime cost sums (4)

6.3 Contingencies (2)
[10]

QUESTION 7

7.1 List FIVE typical expenses incurred by small contractors in the construction of a house. (5)

7.2 Name FIVE different types of costs in construction projects. (5)
[10]

QUESTION 8

Draw a neat sketch of a vertical section through a foundation and show the following items that needs to be measured when 'taking off'.

trench; risk of collapse; concrete footing; foundation wall; hard core; back filling; concrete surface bed. **[10]**

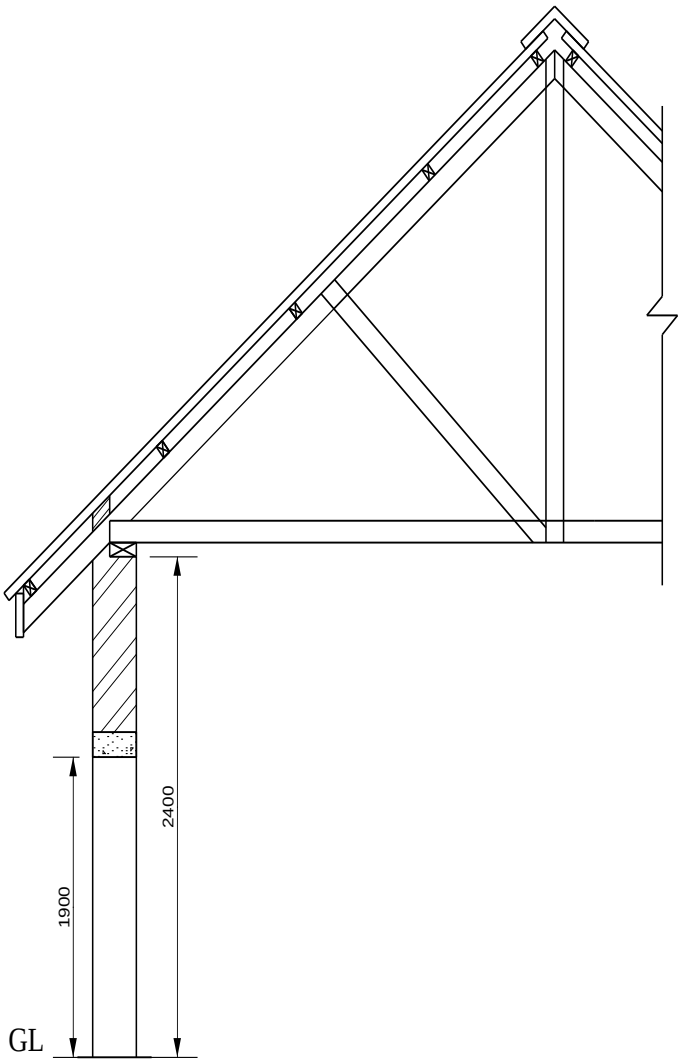
TOTAL SECTION B: 60

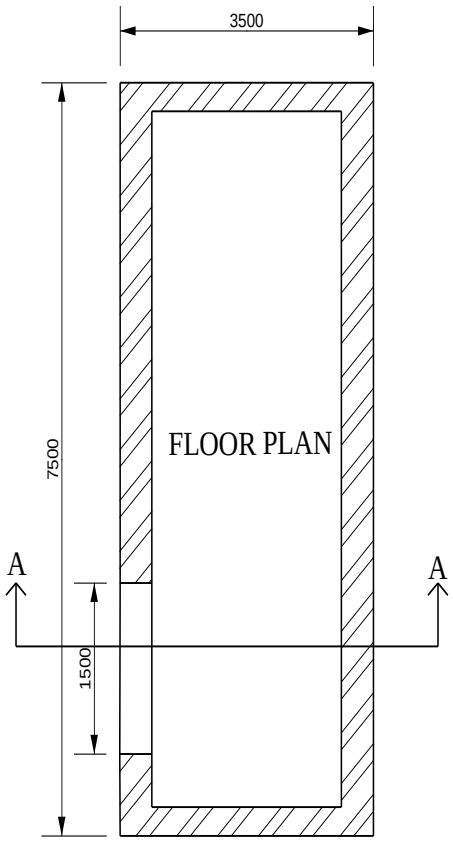
GRAND TOTAL: 100

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ADDENDUM





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