



# education

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Department:  
Education  
**REPUBLIC OF SOUTH AFRICA**

**T1800(E)(M29)T  
APRIL 2010**

**NATIONAL CERTIFICATE**

**QUANTITY SURVEYING N5**

**(2050015)**

**29 March (X-Paper)  
09:00 – 13:00**

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

**Calculators may be used.**

**Candidates must use their OWN unmarked STANDARD SYSTEM OF MEASURING BUILDING WORK.**

**This question paper consists of 6 pages, an addendum and a diagram sheet.**

**DEPARTMENT OF EDUCATION  
REPUBLIC OF SOUTH AFRICA**  
NATIONAL CERTIFICATE  
QUANTITY SURVEYING N5  
TIME: 4 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 correctly according to the numbering system used in this question paper.
  4. Red ink is NOT ALLOWED.
  5. ALL the work in SECTION A, must be done on the appropriate paper.
  6. ALL the work in SECTION B, must be done in the ANSWER BOOK.
  7. Write neatly and legibly.
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**SECTION A**

Use only dimension, abstract and billing sheets to answer the following questions.

SHEET 1 shows the rear view and sectional details of a solid framed, ledge and braced timber door and frame build into a 220 mm thick external wall.

**SPECIFICATIONS:**

- Concrete: - 25 Mpa
- Brickwork: - Ordinary bricks built in stretcher bond  
- 1:4 cement mortar  
- Facings externally
- Floor coverings: - Vinyl tiles to floors
- Carpentry & joinery: - All timbers to be meranti timber  
- Timber skirting internally  
- Horns 75 mm long
- Ironmongery: - 3 No. 100 x 75 mm brass hinges  
- 1 No. 3 lever door lock and furniture
- Plastering: - 19 mm thick internal plaster  
- 30 mm thick floor screed
- Painting: - Two coats clear varnish to all timber surfaces  
- PVA paint to plastered walls

**QUESTION 1**

Measure the work to be done strictly to the following measuring list:

- |     |  |             |
|-----|--|-------------|
| 1.1 | Door   | (2)         |
| 1.2 | Paint to door  | (5)         |
| 1.3 | Ironmongery  | (4)         |
| 1.4 | Door frame   | (6)         |
| 1.5 | Paint to door frame (DO NOT measure priming to frame backs.) | (3)         |
|     |  | <b>[20]</b> |

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**QUESTION 2**

Measure the adjustments to the finishes strictly to the following measuring list:

- |     |  |             |
|-----|--|-------------|
| 2.1 | 220 mm thick wall  | (4)         |
| 2.2 | External facings   | (4)         |
| 2.3 | Internal plaster and paint (DO NOT measure reveals.)     | (4)         |
| 2.4 | Concrete, screed and floor tiling                        | (4)         |
| 2.5 | Timber skirting and varnish (DO NOT measure in reveals.) | (4)         |
|     |  | <b>[20]</b> |

**QUESTION 3**

You are required to present a bill for the Carpentry & Joinery trade measured in QUESTION 1, only.

- |     |                              |             |
|-----|------------------------------|-------------|
| 3.1 | Do the squaring exercise .   | (5)         |
| 3.2 | Do the abstracting exercise. | (7)         |
| 3.3 | Draw up the bill.            | (8)         |
|     |                              | <b>[20]</b> |

**TOTAL SECTION A: 60**

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## SECTION B

Use the ANSWER BOOK to answer the questions in SECTION B.

### QUESTION 4

From the given list of quantity surveying terms, choose the correct answer for the given statements. Write the answer next to the question number (4.1 - 4.10).

ditto; purpose made; measured nett; practical completion; contingencies; interim valuations; interim payment certificate; extra labour and material; preambles; prime cost amount; provisional amounts; specifications; escalations

- 4.1 A reasonably estimate of the total value of the works satisfactorily executed.
- 4.2 A lump sum included in the tender to cover any costs of unforeseen items which may occur during the execution of the project.
- 4.3 Term used to describe work over and above some items already allowed for in the bills of quantities.
- 4.4 Term used to save repeating long descriptions in writing which is similar to the previous description.
- 4.5 The certificate issued by the architect indicating the amount due and payable by the client to the contractor.
- 4.6 The term used to specify that the measurement for any item excludes extras, waste and laps.
- 4.7 An item which must be specially manufactured for a project.
- 4.8 A brief specification on workmanship and quality of materials under each trade.
- 4.9 A sum of money provided in the bills of quantities for materials and goods to be obtained from a supplier nominated by the architect.
- 4.10 An amount allowed in the bills of quantities to provide for specialist work to be carried out by a specialist sub-contractor selected by the architect.

[10]

### QUESTION 5: QUANTITY SURVEYOR

- 5.1 State FIVE duties of a professional quantity surveyor. (5)
- 5.2 State FIVE duties of a construction (building) surveyor. (5)

[10]

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### QUESTION 6: VALUATIONS

Consult the summary of bills of quantities, shown on ADDENDUM A (attached), and prepare the FIRST partial payment to the contractor based on the following information:

- |     |  |      |
|-----|--|------|
| 6.1 | The contract period is 10 months                               |      |
| 6.2 | ALL the earthwork is complete                                  |      |
| 6.3 | 10% of the concrete work is complete                           |      |
| 6.4 | 5% of the masonry is complete                                  |      |
| 6.5 | A further R6 000,00 for plumbing and drainage pipes is allowed |      |
| 6.6 | The value of the unfixed material on site is R9 000,00         |      |
| 6.7 | Allow for a 10% deduction for the retention fund               |      |
| 6.8 | ROUND OFF ALL calculated amounts to the nearest 10 rand (R10)  | [10] |

### QUESTION 7: THE STANDARD SYSTEM

Consult your Standard System for Measuring Building Work and give only the CATEGORY and UNIT to which the following should be measured:

- |     |                      |      |
|-----|----------------------|------|
| 7.1 | Tree stumps          | (2)  |
| 7.2 | Risk of collapse     | (2)  |
| 7.3 | Structural timbers   | (2)  |
| 7.4 | Plate-nailed trusses | (2)  |
| 7.5 | Ceiling battens      | (2)  |
|     |                      | [10] |

<b>TOTAL SECTION B:</b>	<b>40</b>
<b>GRAND TOTAL:</b>	<b>100</b>

## ADDENDUM A

## BILLS OF QUANTITIES

## SUMMARY

1.	Preliminaries	R	150 000,00
2.	Earthworks	R	85 300,00
3.	Concrete, Formwork & Reinforcement	R	550 220,00
4.	Masonry	R	220 500,00
5.	Waterproofing	R	20 310,00
6.	Roof covering	R	150 220,00
7.	Carpentry & joinery	R	65 300,00
8.	Ceilings	R	25 300,00
9.	Floor coverings	R	41 500,00
10.	Ironmongery	R	8 520,00
11.	Metalwork	R	25 000,00
12.	Plastering	R	25 350,00
13.	Plumbing & drainage	R	55 350,00
14.	Glazing	R	24 300,00
15.	Painting	R	55 300,00
16.	External works	R	<u>62 155,00</u>
			<u>R1 539 275,00</u>

DIAGRAM SHEET 1

