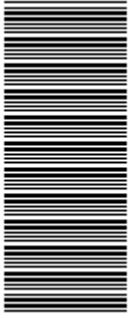


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higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

T1320(E)(J29)T
AUGUST EXAMINATION

NATIONAL CERTIFICATE

QUANTITY SURVEYING N4

(2050004)

29 July 2014 (Y-Paper)
13:00–16:00

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

Nonprogrammable calculators may be used.

**The Standard System Manual for the measuring of builders work may
NOT be taken into the examination room.**

This question paper consists of 6 pages and 1 diagram sheet.

DEPARTMENT OF HIGHER EDUCATION AND TRAINING
REPUBLIC OF SOUTH AFRICA
NATIONAL CERTIFICATE
QUANTITY SURVEYING N4
TIME: 3 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. SECTION A must be answered on the dimension, abstract and billing papers.
 5. SECTION B must be answered in the ANSWER BOOK
 6. In QUESTION 1 the word NIL must be used on the dimension paper.
 7. The work must be answered according to the STANDARD SYSTEM.
 8. Do not use red or green pen.
 9. Do not staple loose pages.
 10. ALL work you do not want to be marked must be clearly crossed out.
 11. Write neatly and legibly.
-

SECTION A**QUESTION 1**

The DIAGRAM SHEET (attached) shows a plan of a roof and a section of a dwelling (not drawn to scale).

SPECIFICATIONS:

- All timber for the trusses are made of 38 × 114 mm pre-treated South African Pine
- Standard bricks in stretcher bond
- 114 × 38 mm wall plate
- 76 × 76 mm wrot eave purlins
- Overhang is 300 mm for eaves and 100 mm for verges
- Pitch of roof is 30°
- Galvanised sheet iron roof cover and ridge piece
- 25 × 152 mm fascia and barge board
- Trusses spaced at maximum 700 centres

Do the following to measure the roof truss:

- | | | |
|-----|--|-------------|
| 1.1 | Draw the roof truss to a scale of 1 : 10 | (3) |
| 1.2 | Take off the corrugated galvanised sheet iron roof covering | (14) |
| 1.3 | Take off the rain water goods | (11) |
| 1.4 | Square, abstract and bill only the carpentry and joinery parts | (12) |
| | | [40] |

TOTAL SECTION A: 40

SECTION B**QUESTION 2**

- 2.1 Write out in full the following sentences as used in the taking off:
- 2.1.1 ECP on bk horizontal surfaces
 - 2.1.2 K.P.S and 2© enamel on timber doors
 - 2.1.3 Ex. For f.f
 - 2.1.4 Fmwk to edge of slab n.e 150 mm hi.
 - 2.1.5 R.oc.to sides of s.t
- (5 × 2) (10)
- 2.2 Write down out in full the abbreviations for the following used in taking off:
- 2.2.1 Removal of large trees
 - 2.2.2 Excavation of vegetable soil to be preserved
 - 2.2.3 Brick paving
 - 2.2.4 Fair cutting to face brick
 - 2.2.5 Face brick lintels
- (5 × 1) (5)
- 2.3 Describe the scope and unit of measurement of plastered finishes as stated in the standard system of measuring building work.
- (5)
[20]

QUESTION 3

3.1 Indicate whether the following statements are TRUE or FALSE. Choose the answer and write only 'true' or 'false' next to the question number (3.1.1–3.1.10) in the ANSWER BOOK.

- 3.1.1 Cutting or altering openings in structures shall be given in numbers and descriptions shall include lintels, arches and making good to jambs and finishes all round.
- 3.1.2 The digging up of and removal of rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200 mm girth, bush etc. shall be given in square metres.
- 3.1.3 Bulk excavations and excavations for trenches and excavations for holes, shall be given in cubic meters separated into depths of 2 m.
- 3.1.4 If the excavated material is to be carted from the site, the carting away thereof shall be given in cubic meters as extra over excavations and if, to be dumped in a prescribed place, the location and approximate distance shall be stated.
- 3.1.5 Concrete shall be given in cubic meters unless otherwise stated.
- 3.1.6 Formwork to edges, risers, ends and reveals not exceeding 300 mm high or wide, shall be given together in meters.
- 3.1.7 Slab paving shall be given in square meters. No deductions shall be made for openings, wants, etc. not exceeding 0,5 m².
- 3.1.8 Roof gutters, rainwater pipes, etc. shall be given in meters and descriptions shall be deemed to include jointing.
- 3.1.9 Paintwork shall generally be given in square meters.
- 3.1.10 Painting gates, grills, burglar screens, balustrades, etc. may be measured over the full flat area of both sides. (10)

3.2 Read the following paragraph concerning the people involved in the building industry and write only the missing word next to the question number (3.2.1–3.2.10) in the ANSWER BOOK.

The (3.2.1) ... needs a certain building and the (3.2.2) ... advises the (3.2.3) ... on the design and will call (3.2.4) ... to assist in all financial matters. As soon as the design and estimates suit the (3.2.5) ..., (3.2.6) ... starts with working drawings. (3.2.6) ... will be called to assist with specialist drawings. Usually (3.2.7) ... will advise on reinforced concrete and (3.2.8) ... will design stanchions and girders (3.2.9) ... and the services of (3.2.10) ... are enlisted to advise on air conditioning, escalators or electrical work.

(10 × 1)

(10)
[20]

QUESTION 4

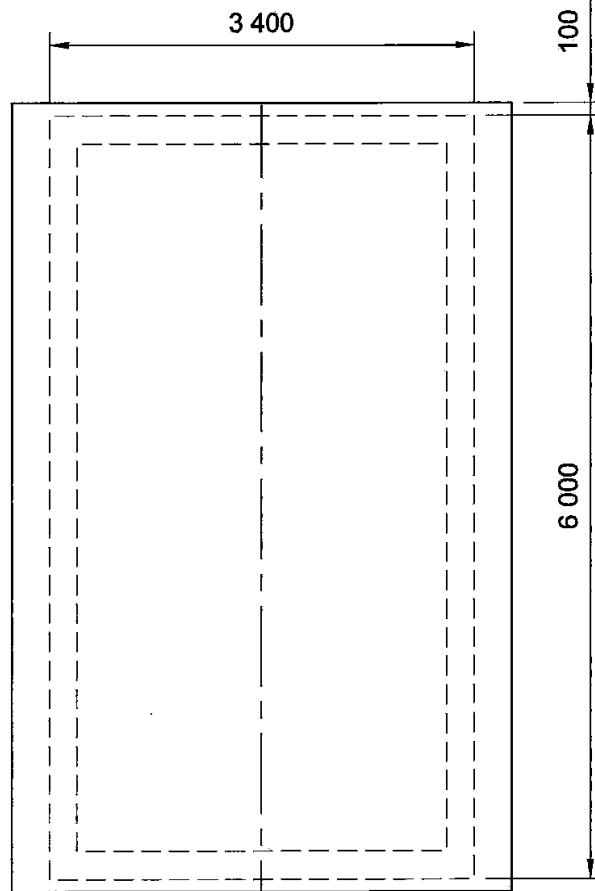
- 4.1 Write the FIVE points to consider when taking off (5)
- 4.2 Describe the general rules to be observed when abstracting (5)
- 4.3 Explain the meaning of *pre contract work* as applicable to the work of the quantity surveyor. Also state what it entails. (10)

[20]

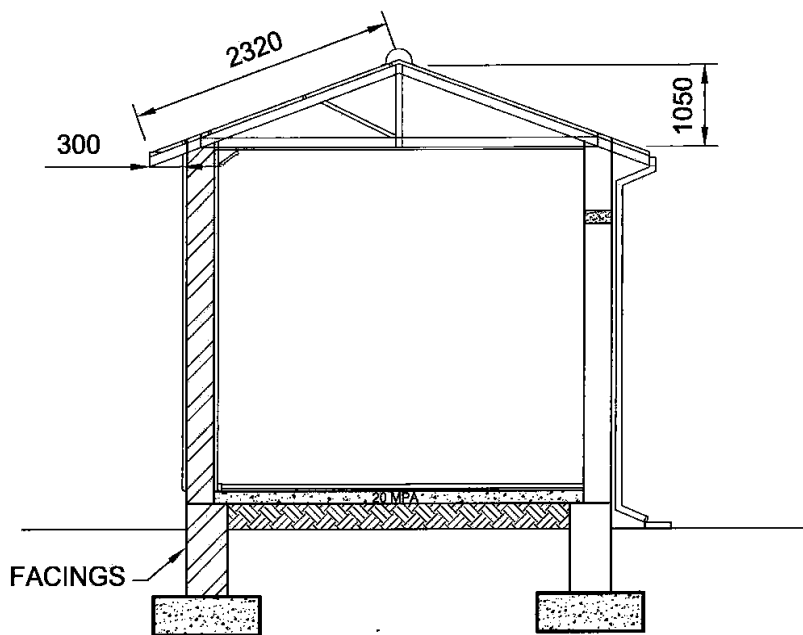
TOTAL SECTION B: 60
GRAND TOTAL: 100

ENGINEERING

DIAGRAM SHEET



ROOF PLAN



SECTION

N.T.S