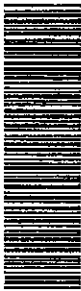


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higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

**T242(E)(N18)T
NOVEMBER 2010**

NATIONAL CERTIFICATE

BUILDING DRAWING N2

(8090012)

**18 November (X-Paper)
09:00 – 13:00**

REQUIREMENTS: A2-drawing paper

This question paper consists of 5 pages.

DEPARTMENT OF HIGHER EDUCATION AND TRAINING
REPUBLIC OF SOUTH AFRICA
NATIONAL CERTIFICATE
BUILDING DRAWING N2
TIME: 4 HOURS
MARKS: 100

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. Use both sides of the drawing paper.
 5. Drawings are to be fully dimensioned and neatly finished with descriptive titles and notes to conform with the SABS Recommended Practice for Building Drawings.
 6. Marks are allocated for neatness, dimensioning, printing and layout.
 7. Write neatly and legibly.
-

QUESTION 1

- 1.1 Draw, to scale 1:10, top view of the alternate plan courses of a right angle corner between TWO one-brick walls built in Flemish bond.

NOTE: NO stopped ends are required. (10)

- 1.2 Draw to scale 1:10, the isometric views of the alternate plan course of a one-and-half-brick quoin (external corner) built in English bond.

Draw TWO walls approximately one meter long to the left of the corner and 0,5 meters to the right of the corner.

NOTE: NO stopped ends are required. The plan courses must be shown separately. (15)
[25]

QUESTION 2

Draw, to scale 1:10, a vertical cross section through a half-brick internal wall of a dwelling. The wall is plastered on both sides.

Show the following details:

- 450 mm × 230 mm strip foundation
- One-brick foundation wall
- Damp-proof course
- 75 mm thick concrete floor finished off with 25 mm thick screed. Show part of the floor on both sides of the wall
- Hardcore filling
- 20 mm × 76 mm skirting
- 20 mm quadrant beading

[18]

QUESTION 3

There are recommended methods of indicating various materials for building drawings in order to avoid the possible confusion likely to occur in their interpretation.

Make neat sketches of the sectioning symbols used for the following:

- 3.1 Plaster bricks
- 3.2 Face brick or fair face
- 3.3 Stone work
- 3.4 Glass

- 3.5 Hardcore filling
- 3.6 Earth (undisturbed)
- 3.7 Block work
- 3.8 Concrete
- 3.9 Wood (rough sawn)
- 3.10 Cross-grain of wood (planed)

[10]

QUESTION 4

Draw, to scale 1:10, a vertical section through an open valley gutter of a corrugated asbestos-cement roof.

Use your own dimensions.

[10]

QUESTION 5

Draw, to scale 1:2, a horizontal section through a door opening with a 150 mm × 38 mm single rebated timber casing built into a half-brick wall plastered on both sides.

The drawing must include the following:

- 150 mm × 38 mm wooden casing
- 19 mm plaster
- Part of the wall
- 75 mm × 19 mm architrave
- 76 mm × 19 mm splayed ground
- Part of the door

Show only ONE half of the opening and a part of the door.

[12]

QUESTION 6

Show, with the aid of neat sketches, the difference between the following window terms:

- 6.1 A glazing bar and a half bead
- 6.2 A mullion and a transom
- 6.3 The head and top rail
- 6.4 A windowsill and window board

(4)

(4)

(4)

(4)

[16]

PTO

QUESTION 7

Draw, to scale 1:10, the isometric drawing of the following brickwork:

- 7.1 Brick-on-edge coping
- 7.2 Soldier brick course

NOTE: The drawing must include ALL dimensions and be SIX bricks long. **[9]**

TOTAL: 100

