



# higher education & training

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Department:  
Higher Education and Training  
**REPUBLIC OF SOUTH AFRICA**

**T40(E)(A4)T  
APRIL EXAMINATION**

**NATIONAL CERTIFICATE**

**BRICKLAYING AND PLASTERING THEORY N2**

(11010102)

**4 April 2016 (X-Paper)  
9:00–12:00**

**Drawing instruments may be used.**

**This question paper consists of 5 pages and 1 diagram sheet.**

**DEPARTMENT OF HIGHER EDUCATION AND TRAINING**  
**REPUBLIC OF SOUTH AFRICA**  
NATIONAL CERTIFICATE  
BRICKLAYING AND PLASTERING THEORY N2  
TIME: 3 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 according to the numbering system used in this question paper.
  4. Write neatly and legibly.
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**QUESTION 1**

- 1.1 Define the term *coping*. (3)
- 1.2 Explain the following terms:
- 1.2.1 Chimney shaft
  - 1.2.2 Chimney back
  - 1.2.3 Chimney breast
  - 1.2.4 Throat
- (4 × 2) (8)  
[11]

**QUESTION 2**

Draw, to an approximate scale of 1 : 10, the alternate plan courses of a TWO brick cross-intersection in English bond.

[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 (3.1.1–3.1.7) in the ANSWER BOOK.
- 3.1.1 Metal laths used for interior application are of a bigger mesh.
  - 3.1.2 Pumice blocks are made from cuts that passed through the shaving machine, cut and then bonded with fibres to make it more rigid.
  - 3.1.3 Base screeds, corner screeds and metal casings are the accessories that are used with breeze blocks.
  - 3.1.4 Calcium silicate bricks were originally known as sand lime bricks.
  - 3.1.5 Scrim is a fine metal mesh used to reinforce joints on plaster board ceilings.
  - 3.1.6 Fire bricks find their greatest use in production of iron and steel.
  - 3.1.7 Fire bricks have the ability to withstand abrasion.
- (7 × 1) (7)

3.2 Choose the correct word from those given in brackets and write only the correct answer next to the question numbers (3.2.1–3.2.3) in the ANSWER BOOK.

Cork slabs are used mainly for ... **3.2.1** (insulation / bonding) against ... **3.2.2** (heat/coldness) in cold-rooms and against ... **3.2.3** (sound / leakages) in ceilings of various buildings.

(3)  
[10]

#### QUESTION 4

Draw, to an approximate scale of 1 : 10, a vertical section through the bottom 8 courses of a 270 mm cavity wall and show the following detail:

- Concrete strip foundation 600 mm x 200 mm
- Concrete floor slab 75 mm
- Screed 20 mm
- Hardcore
- Plaster internal 15 mm
- Ground level two courses above the foundation
- Top of floor slab five courses above foundation
- Damp-proofing to wall and floor
- Wall tie
- Concrete to cavity
- Hatching to foundation, floor slab and hard core

[20]

#### QUESTION 5

5.1 Briefly describe the method used to pave a small area using paving bricks.

(10)

5.2 DIAGRAM SHEET 1, FIGURE 1, shows a scaffolding system.

Next to each component number (5.2.1–5.2.9) write the name of each component in the ANSWER BOOK.

(9)  
[19]

**QUESTION 6**

6.1 Given below, are points (not in sequence) to be followed when tiling a dry plastered wall. Rewrite the points in their correct procedure next to the question numbers (6.1.1–6.1.12) in the ANSWER BOOK.

- Remove the excess and clean the tiles with dry cloth.
- Remove the spacers.
- Measure, cut and lay the tiles around the edge.
- Fill the one half with tiles using spacers, maintaining plumb vertical and horizontal joints.
- Use a notched trowel and apply adhesive to the wall.
- Fill the joints with grout.
- Determine the centre line of the wall and draw a plumb line.
- Remove the vertical batten and lay the remaining half using spacers.
- Start laying the tiles by positioning the first tile on the horizontal batten against the vertical batten.
- Fix a batten with the top edge of the height of one tile from the floor.
- Nail a batten to one side of the centre line.
- Remove the horizontal batten and lay the bottom row.

(12 × 1) (12)

6.2 Complete the following sentence by filling in the missing word(s). Write only the word(s) next to the question number (6.2.1–6.2.3) in the ANSWER BOOK.

A column is an upright shaft generally rectangular or round, made of ... (6.2.1) ... (6.2.2) , ... (6.2.3) and steel.

(3)

6.3 Choose only FIVE of the general rules for the running of moulds from those given below. Write the correct answer(s) (in any point form) in the ANSWER BOOK.

- Check that the screeds are true.
- Quantity of material is available at all times.
- Excess material must be put aside.
- Distance from the inside must be greater than the outside.
- Method of fixing should depend on the size of the object.
- The mould should be run outside the rule and screeds.
- Keep any nails in the rules clear of the mould.
- Make sure that the rules clearly line with each other.
- Protect the finished surfaces at all times.
- When not in use, keep it in a safe place.

(5)  
[20]

**TOTAL: 100**

DIAGRAM SHEET 1

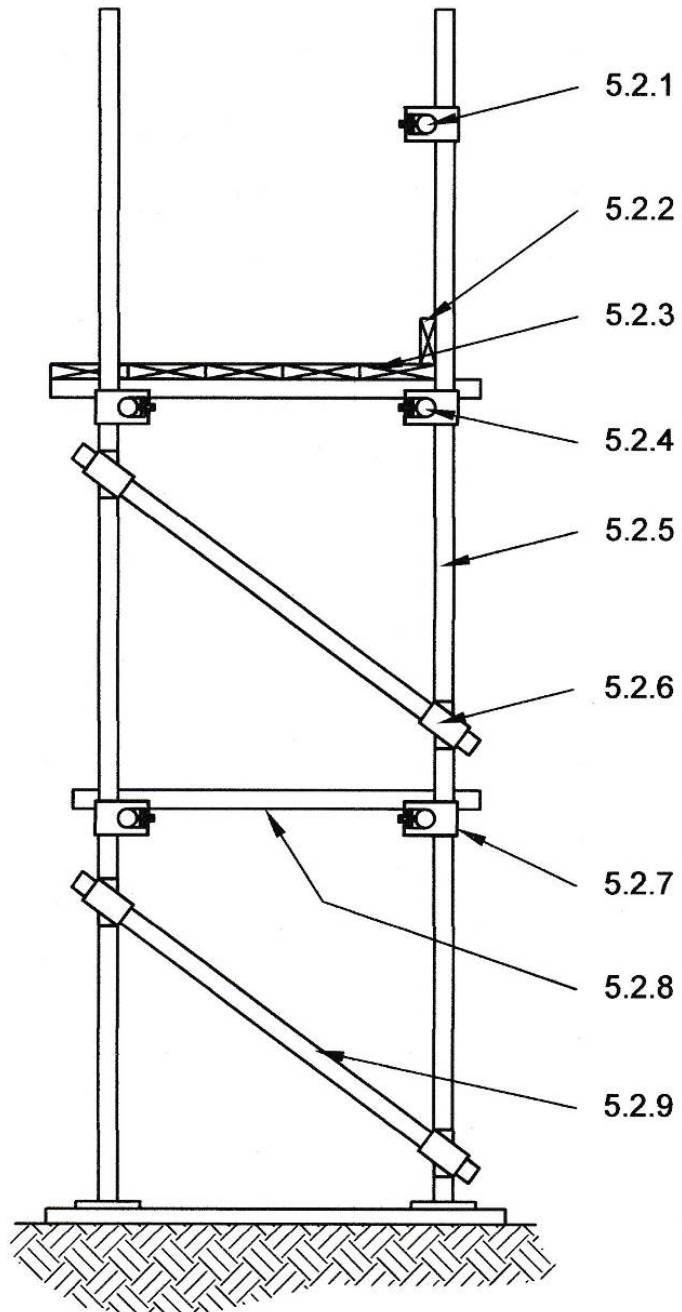


FIGURE 1