higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

T80**(E)**(A8)T

NATIONAL CERTIFICATE

BRICKLAYING AND PLASTERING THEORY N2

(11010102)

8 April 2019 (X-Paper)
09:00–12:00

This question paper consists of 5 pages.

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DEPARTMENT OF HIGHER EDUCATION AND TRAINING
REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE
BRICKLAYING AND PLASTERING THEORY N2
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. Write neatly and legibly.

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QUESTION 1

1.1 Explain the following terms that are used in bricklaying and plastering theory:

1.1.1 Scotch bracketing

1.1.2 Running mould

(3 × 2) (6)

1.2 List any FOUR parts of a 'running mould'. (4)

[10]

QUESTION 2

2.1 Gypsum boards have two distinctly different sides depending if it requires direct painting or plastering first.

Which side will be on the outside in the following cases:

2.1.1 If the boards are to be plastered

2.1.2 If the boards are to be painted

(2 × 1) (2)

2.2 Name FOUR different types of metal laths that are used internally. (4)

2.3 Explain the correct procedure to be followed when cutting plaster boards. (4)

2.4 Fire bricks are made from refractory material and can withstand very high temperatures.

Name SIX places where fire bricks can be used. (6)

2.5 Name FOUR different types of blocks or slabs used in the building industry. (4)

[20]

QUESTION 3

3.1 Explain the requirements for underfloor ventilation in terms of suspended wooden floors. (6)

3.2 Give THREE advantages of 'faience' when compared to 'terracotta'. (3)

3.3 Name THREE different ways of forming edge restraint for pavers. (3)

3.4 State any THREE reasons why spacers are used during tilling. (3)

[15]

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QUESTION 4

Draw the alternate plan courses of a one-and-a-half brick acute corner in English bond to an approximate scale of 1:10. **[20]**

QUESTION 5

Draw a vertical cross-section of a suspended timber floor to an approximate scale of 1:10.

The drawing must show the following details:

- Concrete foundation 1:4:5
- 55 mm corbelling
- DPC
- Airbrick
- Sheet metal ant guard
- Wall plate: 114 × 38
- Plaster internally: 15 mm
- Brick pier: 5 courses from foundation to underside of ant guard
- 76 × 22 floor boards
- 70 × 20 skirting
- 76 × 50 bearer **[15]**

QUESTION 6

Complete the following paragraphs by using the words given in the list below. Write only the correct answer next to the numbers (6.1–6.10) in the ANSWER BOOK.

shaft; column; support; pillar; entasis; demolition; base; square; triangular; round; pier; steel; opening; decoration

A (6.1) … can be defined as an upright, (6.2) … pillar supporting an entablature, arch or other structure, while a (6.3) … is a tall, usually (6.4) … structure which is also used to (6.5) … or for (6.6) …

A (6.7) … is the swelling in the shaft of the columns. A (6.8) … is the load-bearing brickwork between openings. Columns consist of three parts: cap, (6.9) … and (6.10) …

(10 × 1) **[10]**

QUESTION 7

7.1 State any FOUR aspects of a builder's trestle that should be seriously inspected before it is used by workers at a site. (4)

7.2 Indicate whether the following statements are TRUE or FALSE. Choose the answer and write only 'True' or 'False' next to the question number (7.2.1–7.2.6) in the ANSWER BOOK.

7.2.1 Base jacks allow the height of the scaffolding to be adjusted on uneven ground.

7.2.2 Base plates are used for fixing braces that need to be tightened up.

7.2.3 A transom is a horizontal tube connecting standards.

7.2.4 Ledges are used to form vertical support for the scaffold.

7.2.5 Standards are used as barriers along the sides and ends of the platform.

7.2.6 Sole plates form the base of the scaffold.

(6 × 1) (6)
[10]

TOTAL: 100

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