higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

T80**(E)**(A1)T

NATIONAL CERTIFICATE

BRICKLAYING AND PLASTERING THEORY N2

(11010102)

1 August 2018 (X-Paper)
09:00–12:00

Candidates will require drawing instruments.

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.

QUESTION 1

1.1 Briefly explain the term *rough arch*. (3)

1.2 State FOUR requirements of a running mould. (4)

1.3 Name FOUR bonds to which concrete pavers can be laid. (4)

1.4 Name FIVE different types of arches in common use in South African building construction. (5)

1.5 What materials are used to manufacture concrete building blocks? (2)

[18]

QUESTION 2

2.1 Draw to scale 1 : 10, the alternate plan courses of a two-brick isolated pier in English bond. (8)

2.2 Show, by means of sketches, the front view of a wall built in English bond and in Flemish bond. (8)

2.3 State THREE different directions from which moisture can penetrate through the walls of a building. (3)

[19]

QUESTION 3

3.1 State the TWO standard sizes in which plaster board is supplied. (2)

3.2 Briefly describe how wood-wool slabs are manufactured. (4 × 2) (8)

3.3 Define the following terms:

3.3.1 Pilaster

3.3.2 Pier

3.3.3 Column

(3 × 2) (6)

3.4 Briefly explain the term *terrazzo*. (4)

[20]

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QUESTION 4

4.1 Briefly explain the difference between the following:

4.1.1 Interior metal lathing

4.1.2 Exterior metal lathing

(2 × 2) (4)

4.2 State FOUR methods of curing concrete. (4)

4.3 Show the geometrical setting of a three-centred arch with a span of 1 000 mm and a riser of 350 mm. Show ALL the construction lines.

Use scale 1 : 10. (12)

[20]

QUESTION 5

5.1 State FOUR advantages of using a cavity wall construction compared with a solid outside wall. (4)

5.2 Choose an item/word from COLUMN B to matches a description in COLUMN A. Write only the letter (A–I) next to the question number (5.2.1–5.2.7) in the ANSWER BOOK.

COLUMN A		COLUMN B	
5.2.1	Render the inside of a flue with lime-cement mortar	A	width
5.2.2	A braced or unbraced cantilever beam	B	outrigger
5.2.3	Incline from the perpendicular; to tapper	C	batter
5.2.4	The curve in the form of a segmental arch	D	camber
5.2.5	Lower section of the entablature	E	architrave
5.2.6	Top part of the column	F	capital
5.2.7	The partition/measurement between two flues in the same stack	G	parget
		H	register
		I	internal plaster

(7 × 1) (7)

[11]

QUESTION 6

6.1 State FIVE external factors that may cause a chimney to smoke. (5)

6.2 Name SEVEN scaffolding parts that are used in constructing an independent scaffold. (7)
[12]

TOTAL: 100

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