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Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

T10**(E)**(N17)T

NOVEMBER EXAMINATION

NATIONAL CERTIFICATE

BRICKLAYING AND PLASTERING THEORY N1

(11010091)

17 November 2016 (X-Paper)
09:00–12:00

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DEPARTMENT OF HIGHER EDUCATION AND TRAINING
REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE
BRICKLAYING AND PLASTERING THEORY N1
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. Drawings must be large, neat and in good proportion.
5. ALL the drawings must be fully labelled.
6. Write neatly and legibly.

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QUESTION 1

1.1 Indicate whether the following statements are TRUE or FALSE. Choose the answer and write only 'true' or 'false' next to the question number (1.1.1–1.1.10) in the ANSWER BOOK.

1.1.1 Voussoirs are a row of bricks in the arch.

1.1.2 A key-brick is that wedge-shaped brick in an arch.

1.1.3 Span is the underside edge of an arch.

1.1.4 The soffit is the highest or the central brick and usually the last to be built in.

1.1.5 Springing line is the horizontal distance between the jambs of the opening over which an arch is bridged.

1.1.6 Striking point is the centre point from which the curve of the arch is drawn.

1.1.7 Extrados is the upper edge of an arch as seen from the front.

1.1.8 Intrados is the underside of an arch when seen in elevation.

1.1.9 Rise is the vertical distance between the springing line and the highest point of the soffit.

1.1.10 Ring is a row of bricks in the arch.

(10 × 10) (10)

1.2 Complete the following paragraph on mouldings, by choosing the correct word(s) from those given in brackets. Write only the word(s) next to the question number (1.2.1–1.2.5) in the ANSWER BOOK.

There are basically two types of mouldings, namely Roman and (1.2.1 … Asian/Greek). The (1.2.2 … Roman/Asian) mouldings are usually made up of arcs of (1.2.3 … segments/circles), whereas the (1.2.4… Asian/Greek) mouldings are similar but more varied. Their curves are made in (1.2.5… elliptical/circular) shape. (5)

1.3 Name FIVE different ways in which bricks can be laid. (5)
[20]

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QUESTION 2

2.1 Make a neat labelled sketch to an approximate scale of 1 : 10 of the front elevation of a wall built in stretcher bond. The wall must be SIX courses high.

The drawing must clearly show the following details:

- Bed joints
- Racking back
- Toothing
- Stretcher course
- Stopped-end on the one side (10)

2.2 Complete the table shown below, by filling in the missing tool classification and tool example(s). Write only the correct answer next to the question number (2.2.1–2.2.10) in the ANSWER BOOK.

TOOL CLASSIFICATION	TOOL EXAMPLE(S)
Setting-out tools	Straight-edge **2.2.1 …** **2.2.2 …**
2.2.3 …	Gauge rod **2.2.4 …** **2.2.5 …**
Brick-cutting tools	**2.2.6 …** **2.2.7 …**
2.2.8 …	Tile nipper **2.2.9 …** **2.2.10 …**

(10 × 1) (10)

[20]

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QUESTION 3

3.1 Briefly explain how a test cube is made. (10)

3.2 It is very important that no segregation takes place when transporting concrete.

Indicate FOUR ways in which concrete can be transported around the site. (4)

3.3 Give FOUR different types of cement that are commonly used within the construction industry. (4)

3.4 Define the term *tanking* as used within the construction industry. (2)
[20]

QUESTION 4

4.1 Briefly describe the correct procedure to plaster and float a blank wall ready for painting. (12)

4.2 Name FIVE standard classes of fire bricks. (5)

4.3 Show your understanding by defining the term *mortar* as used within the construction industry. (3)
[20]

QUESTION 5

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

(2 x 10) **[20]**

TOTAL: 100

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