



higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

**T30(E)(M30)T
APRIL EXAMINATION**

NATIONAL CERTIFICATE

BRICKLAYING AND PLASTERING THEORY N1

(11010091)

**30 March 2016 (X-Paper)
09:00–12:00**

This question paper consists of 4 pages.

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. Write neatly and legibly.
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QUESTION 1

- 1.1 Name FIVE brick-cutting tools. (5)
- 1.2 Name THREE properties of firebrick. (3)
- 1.3 Name FIVE different ways that bricks can be laid when performing bricklaying. (5)
- 1.4 To determine whether sand is suitable for use, tests can be carried out.
Name the THREE tests. (3)
- 1.5 Sand is classified as coarse or fine, which is determined by means of grading sand.
Briefly explain what is meant by the term *grading*. (2)
- 1.6 Define the term *efflorescence* that occurs in brickwork. (2)
- [20]**

QUESTION 2

- 2.1 Briefly describe how slaked lime is manufactured. (10)
- 2.2 Admixtures are added to concrete and mortar to change the properties of the mix.
Name FOUR different types of admixtures. (4)
- 2.3 Briefly explain the method used to perform a slump test. (6)
- [20]**

QUESTION 3

- 3.1 Draw, to an approximate scale of 1 : 10, the alternate plan courses of a one-and-a-half corner in Flemish bond. (10)
- 3.2 Draw, to an approximate scale of 1 : 10, the alternate plan courses of a one-and-a-half square isolated pier in Flemish bond. (10)
- [20]**

QUESTION 4

- 4.1 Name FIVE different types of sand commonly used in the construction industry. (5)
- 4.2 Briefly describe the method used to mix concrete by hand. (13)
- 4.3 Name TWO types of mouldings used in decorative work. (2)
- [20]**

QUESTION 5

- 5.1 Define the term *no-fines concrete*. (3)
- 5.2 Name the material used to make no-fines concrete. (3)
- 5.3 Name FOUR good housekeeping rules. (4)
- 5.4 Briefly explain what is meant by the following arch terms:
- 5.4.1 Intrados
 - 5.4.2 Rise
 - 5.4.3 Span
 - 5.4.4 Extrados
 - 5.4.5 Arch centre
- (5 × 2) (10)
- [20]**
- TOTAL: 100**