



higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

T170(E)(J26)T

NATIONAL CERTIFICATE

BUILDING AND STRUCTURAL SURVEYING N5

(8060045)

26 July 2019 (X-Paper)

09:00–12:00

Nonprogrammable calculators may be used.

This question paper consists of 4 pages, 3 addenda and 1 formula sheet.

DEPARTMENT OF HIGHER EDUCATION AND TRAINING
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BUILDING AND STRUCTURAL SURVEYING N5
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 Briefly explain each of the following terms used in surveying:
- 1.1.1 Invert level
 - 1.1.2 Contour interval
 - 1.1.3 Instrument
 - 1.1.4 Chainage
 - 1.1.5 Taping
- (5 × 3) (15)
- 1.2 Study ADDENDUM A (attached) to indicate whether the following statements are TRUE or FALSE. Choose the answer and write only 'True' or 'False' next to the question number (1.2.1–1.2.5) in the ANSWER BOOK.
- 1.2.1 All private roads are 10 m wide.
 - 1.2.2 The total number of erven illustrated is thirty.
 - 1.2.3 MH020–MH037 are illustrated manholes/inspection chambers.
 - 1.2.4 The scale used is 1:1000.
 - 1.2.5 Erf 191 is illustrated as a private open space (POS).
- (5 × 2) (10)
[25]

QUESTION 2

ADDENDUM B (attached) shows details of REESTON INTERNAL SERVICES AREA – SEWER LAYOUT junction C1–C7. There are FIVE sections of the pipeline to be considered.

- 2.1 Calculate the total length of pipework from C1–C7. (25)
- 2.2 State FIVE points on how to achieve accurate taping. (10)
- 2.3 List any FIVE tools necessary to conduct step chaining. (5)
[40]