higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

T60**(E)**(A12)T
APRIL EXAMINATION

NATIONAL CERTIFICATE

BUILDING ADMINISTRATION N5

(4090045)

12 April 2016 (X-Paper)
09:00–12:00

This question paper consists of 7 pages.

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DEPARTMENT OF HIGHER EDUCATION AND TRAINING
REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE
BUILDING ADMINISTRATION N5
TIME: 3 HOURS
MARKS: 100

INSTRUCTIONS AND INFORMATION

1. Answer ALL the questions.
2. The length of the answers should depend on the marks allocated.
3. Answer in full sentence where applicable.
4. Incomplete, cryptic phrase will be penalised.
5. Number the answers according to the numbering system used in this question paper.
6. Use your own words.
7. Write neatly and legibly.

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QUESTION 1

A few paragraphs on the general foreman regarding some of his/her qualification, personal characteristics and duties are given below.

Write only the missing word or phrases next to the question number.

Depending on the size of the project, the general foreman should be a fully qualified 1.1 … or should have a technical diploma/degree in construction management or a similar qualification.

He/she must be able to work under extreme pressure and must be able to identify and solve 1.2 … he/she should be flexible, practical and helpful.

Although he/she must … work to various trade foremen, the storekeeper, sub-contractors and others, the ultimate 1.4 … for the smooth running of the project lies with him/her.

He/she must see to it that all activities run according to the master 1.5 … The required equipment and material must always be available. Various trade teams and sub-contractors have to be 1.6 … to ensure smooth interaction.

It is his/her duty to make sure that construction is carried out according to the contract 1.7 …, that the architects site instructions are incorporated and that 1.8 … for any changes are issued and authorised.

He/she must be responsible for all 1.9 … precautions that means he/she has to check, for example, if hard hats are worn.

He/she must maintain a neat site office and has to keep the drawing register and progress 1.10 … up to date.

(10 × 1) **[10]**

QUESTION 2

Choose from the list below the applicable term for reach of the following quality requirements:

Water	bricks
Structural timber	cement
Stone	ceramic sanitary fittings
Steel frames	glass pane
Sand	hardcore filling
Reinforcing steel	ironmongery
Ready mixed concrete	paint
PVC pipes	putty

2.1 It should be prime coated and should be stacked vertically to prevent twisting and for easy access.

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2.2 It should be free of knots and each member must be continuous length without laps.

2.3 It should give a clear (not hollow) sound when lightly knocked with metallic object such as a screw driver.

2.4 When packed in sacks and stored under good conditions, it is still expected to lose its strength slowly.

2.5 It workability is tested with slump test.

2.6 It should give a clear (not hollow) sound when two of its kind is knocked against each other.

2.7 It should consist of well traded and smooth, rounded particles.

2.8 It should consist of a single size and smooth, rounded particles.

2.9 If not immediately used, it should be spread out on site across poles with colour tags for easy identification.

2.10 If it is taken from a municipal source, it can be accepted as suitable.

(10 × 1) **[10]**

QUESTION 3

Indicate whether the following statements are TRUE or FALSE. Choose the answer and write only 'true' or 'false' next to the question number (3.1–3.10) in the ANSWER BOOK.

3.1 A plan is a layout of a building drawn on a horizontal plane.

3.2 Sketches are preliminary freehand drawings and do not form part of the contract document.

3.3 Drawings are the coloured isometric artistic elevationary view of a proposed building.

3.4 Specifications are written instructions concerning the quality of material and workmanship.

3.5 Blank bill of quantities are issued together with the tender documents.

3.6 In the principal building agreement (schedule of conditions) the tender procedure is explained.

3.7 The form of tender is to be completed (filled in) by the professional quantity surveyor.

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3.8 The architect issues variation orders to instruct changes to the original documents.

3.9 The final account is an invoice from the building surveyor claiming payment for all extras.

3.10 The final certificate is issued by the architect to release the contractor of all duties.

(10 × 1) **[10]**

QUESTION 4

4.1 List FIVE different earthwork categories in which mechanical plant may be grouped with ONE type of mechanical plant in EACH of the categories. (5)

4.2 Explain the following in modern road construction:

4.2.1 THREE advantages of mechanisation (3)

4.2.2 TWO advantages of labour intensive method (2)
[10]

QUESTION 5

5.1 What is the basic meaning of the following?

5.1.1 A contract

5.1.2 A document

5.1.3 Contract document

(3 × 1) (3)

5.2 Explain ONE use of each of the following documents:

5.2.1 Working drawing

5.2.2 Specification

5.2.3 Bill of quantities

5.2.4 Form of tender

5.2.5 Principal building agreement (schedule of condition)

5.2.6 Interim payment certificate

5.2.7 Final account

(7 × 1) (7)
[10]

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QUESTION 6

Fully explain how the following is incorporated in a building contract:

6.1 Nominated sub-contractors

6.2 Selected sub-contractors

[10]

QUESTION 7

Define the following people or professionals on the construction site:

7.1 Agent

7.2 Architect

7.3 Engineer

7.4 Office manager

7.5 Building control officer

(5 × 2) **[10]**

QUESTION 8

8.1 What is meant by:

8.1.1 Planning

8.1.2 Programming

8.1.3 Progress (on a programme)

8.1.4 Admission

(4 × 1) (4)

8.2 Name THREE types of detail programmes.

8.2.1 Why are they used?

8.2.2 Where are they used?

8.2.3 How are they used?

(3 × 2) (6)
[10]

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QUESTION 9

Prepare a complete agenda for the contractor's site meeting where you will be the chairperson. **[10]**

QUESTION 10

10.1 Name and define THREE systematic ways in which construction work can be programmed. (6)

10.2 What is meant by *planning* in the construction industry? (2)

10.3 State TWO objectives of planning in construction industry. (2)
[10]

TOTAL: 100

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