higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE

BUILDING ADMINISTRATION N4

(4090034)

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DEPARTMENT OF HIGHER EDUCATION AND TRAINING
REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE
BUILDING ADMINISTRATION N4
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. Start each question on a new page.
5. Use only a black or blue pen.
6. Write neatly and legibly.

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QUESTION 1

Various options are given as possible answers to the following questions. Choose the answer and write only the letter (A–D) next to the question number (1.1–1.10) in the ANSWER BOOK.

1.1 Lifts for workers can be defined as …

A elevators that convey loads upwards.
B hoists that transport loads vertically by means of a moving platform.
C transportation between sites.
D belts that transport loads horizontally.

1.2 Builders' cranes can be defined as …

A devices that supply building sites with temporary water.
B equipment that can reach higher places.
C devices that lift loads by means of a hook on a rope.
D power-driven plumber's equipment named after a bird.

1.3 Cantilever cranes consist of a/an …

A expandable hydraulic boom stabilised by outriggers.
B rotating jib on top of the tower.
C fly jib fixed to the top of the main boom.
D self-propelled cranes.

1.4 Tower cranes are …

A cantilever cranes.
B placed on top of a tower.
C derrick cranes.
D mobile mast cranes.

1.5 Telescopic cranes …

A can extend its lifting capacity.
B are wheel or track mounted.
C operate on cranes.
D can be easily dismantled.

1.6 The crane with a lever that slides out its maximum length is called a …

A climbing tower crane.
B supported crane.
C capacity crane.
D telescopic crane.

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1.7 The cranes commonly observed at South African sites are …

A tower cranes.
B blocks.
C stationery cranes.
D mobile cranes.

1.8 A/An … can move from site to site without being dismantled.

A mast crane
B mobile crane
C independent crane
D scaffold

1.9 A hook block is the frame that holds the … of a crane.

A lifting jib
B counter jib
C slewing jib
D pulley

1.10 … cranes are mounted onto rails and can move a limited distance on the construction site.

A Travelling
B Stationery
C Mobile
D Telescopic

(10 × 1) **[10]**

QUESTION 2

Indicate whether the following statements are TRUE or FALSE by writing only 'True' or 'False' next to the question number (2.1–2.10) in the ANSWER BOOK.

2.1 Invoices must be checked against orders from the buying department.

2.2 Invoices are requests for payments.

2.3 Invoices must be kept for any queries during the final account stage.

2.4 Every invoice must be paid twice and double its price to avoid arrears.

2.5 A copy of the invoice should not accompany the payment.

2.6 The contractor must insist on receiving receipts.

2.7 A receipt is proof issued by the supplier that payments must not be paid in advance.

2.8 Receipts must never be compared with subsequent invoices or any other contract documents.

2.9 It is good practice to regularly request a statements list of the most recently invoiced items and payments.

2.10 For contract work, the buyer must place all orders in good time for the material and plant.

(10 × 1) **[10]**

QUESTION 3

Choose the correct term from COLUMN B that matches a description in COLUMN A. Write only the letter (A–J) next to the question number (3.1–3.10) in the ANSWER BOOK.

	COLUMN A		COLUMN B
3.1	Tender open for all builders	A	rotation
3.2	Type of tender often used by the private sector	B	open tender
3.3	Popular method in government departments that gives many builders a chance to tender	C	closed tender
		D	negotiation
3.4	Estimated prices and shortest construction time	E	speculation
3.5	When an employer comes to an agreement with a builder who has worked for him/her before	F	tender
		G	negotiation tender
3.6	Risking the firm's own money to build flats	H	arrangement
3.7	Telling people about a builder who specialises in alterations	I	reputation
		J	recommendation
3.8	When good work advertises itself because of good services and quality built up over a long time		
3.9	Very similar to negotiate and not based on competition		
3.10	Standing agreement with chain stores, banks and other nationwide companies		

(10 × 1) **[10]**

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QUESTION 4

Complete the following sentences by writing only the missing word or words next to the question number (4.1–4.10) in the ANSWER BOOK.

4.1 A/An … programme helps to establish the contract period.

4.2 The … programme or phase programme gives more clarity about issues such as labour teams.

4.3 The … is the key to symbols used for bars.

4.4 The … date indicates when work must be finished as agreed in the contract.

4.5 A … is a schedule with tasks to be performed in a set sequence in a specific time slot.

4.6 Only a successful tender prepares the … programme.

4.7 The progress chart is a bar chart and is also called a/an … chart.

4.8 The … date is the contractor's aim to finish before the date of completion.

4.9 On a programme the target date should be shown some time before the … date

4.10 … are thick horizontal lines that represent the duration of certain operations.

(10 × 1) **[10]**

QUESTION 5

5.1 Make neat, labelled sketches of each of the following types of scaffolding:

5.1.1 Truss-out scaffold

5.1.2 Independent scaffold

(2 × 10) (20)

5.2 State SEVEN regulations regarding the safe erection of a scaffold. (7)

[27]

QUESTION 6

6.1 Give TWO guidelines for the inspection of shoring. (2)

6.2 Give TWO causes of the collapse of structures. (2)

6.3 Make a neat, labelled sketch to show how a single flying shore is used to support a weak wall. (10)
[14]

QUESTION 7

7.1 Give FIVE reasons why it could become necessary to deviate from the original planned programme. (5)

7.2 List FOUR objectives of effective and efficient planning. (4)

7.3 Prepare a pre-tender programme for a contract that should take between 10 to 14 months to complete. (10)
[19]

TOTAL: 100

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