



higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE

BUILDING ADMINISTRATION N5

(4090045)

18 November 2020 (X-paper)
09:00–12:00

This question paper consists of 6 pages.

129Q1E2018

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. Read all the questions carefully.
 3. Number the answers according to the numbering system used in this question paper.
 4. Write neatly and legibly.
-

QUESTION 1

1.1 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 (1.1.1–1.1.5) in the ANSWER BOOK.

1.1.1 Which of the following cranes has a slewing mast and jib?

- A Mobile crane
- B Gayed derrick
- C Scotch derrick
- D Travelling crane



1.1.2 A power float is used for levelling:

- A Tamping ground
- B Cleaning carpets
- C Levelling concrete
- D Smoothing plastering



1.1.3 Pan mixers are used to mix:

- A Mortar
- B Concrete
- C Bag wash
- D In kitchen

1.1.4 Scotch derrick is used for...

- A levelling.
- B compacting.
- C lifting.
- D excavating.

1.1.5 The machine suitable for excavating vertically is a:

- A Back actor
- B Bulldozer
- C Face shovel
- D Dragline



(5 × 1)

(5)

1.2 Identify the following machineries used for construction and write the name next the question number (1.2.1–1.2.5) in the ANSWER BOOK.

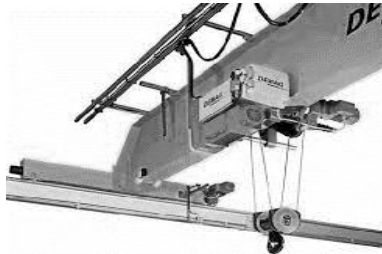
1.2.1



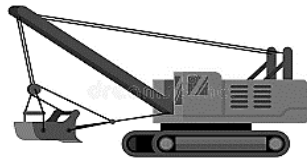
1.2.2



1.2.3



1.2.4



1.2.5



(5 × 1)

(5)

1.3 Name FOUR types of sanders.



(4)
[14]

QUESTION 2

2.1 Describe in full the objectives of planning. (5)

2.2 Draw a master plan or Gant chart using the following information:

Day 1-3 site clearing, day 2 -4 excavation, day 4- 8 concreting foundation
 Day 7- 15 brick work, day 12 – 14 electrical, day 12- 20 plastering
 Day 15- 17 plumbing, day18- 20 flooring, day16 -20 roofing
 Day 21- 24 tiling, day 21-23 electrical, day 22-25 painting



(6)

2.3 Calculate how many brick layers are needed to finish a job in 4 days using the following information:

Total area for bricklaying 48 m²
 One brick layer packs 0.5 m² of brick per hour
 Consider an 8-hour workday

(3)

[14]**QUESTION 3**

Briefly define the following conditions:

3.1 Completion list

3.2 Preliminary completion list

3.3 Defect's list



3.4 Patent defects liability period

3.5 Practical completion

3.6 Certificate of completion

(6 × 2)

[12]**QUESTION 4**

4.1 Give TWO reasons why contractors and clients resort to arbitration rather than going through court. (2)

4.2 Explain *tender appreciation*. (2)

4.3 Give FOUR important qualities of a sub-contractor before he/she will be appointed. (4)



4.4 Name the next FOUR stages in contract planning after a tender is awarded. (4)

[12]

QUESTION 5

- 5.1 Name FIVE areas that need the approval from the building inspector. (5)
- 5.2 Explain *provisional sums*. 🧐 (2)
- 5.3 List the SEVEN major processes of management. (7)
- 5.4 List THREE advantages of labour-intensive construction (3)
- [17]**

QUESTION 6

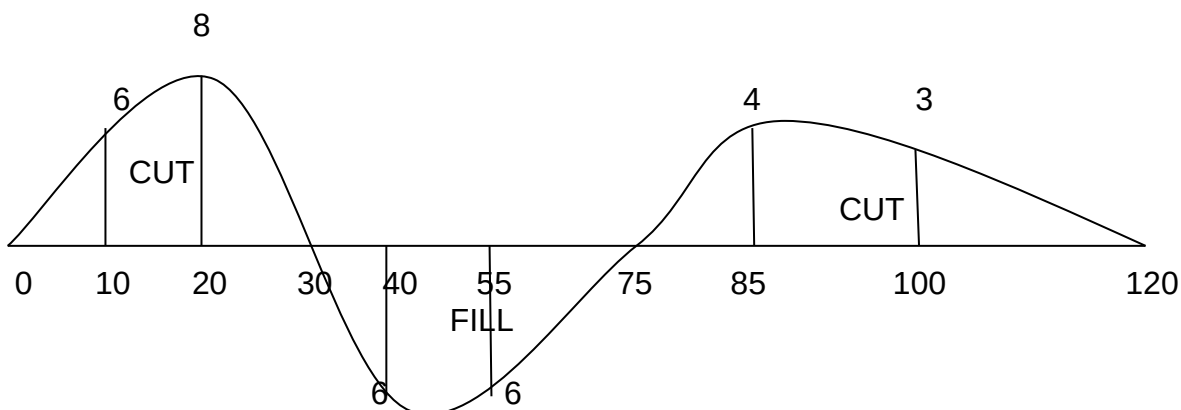
- 6.1 List SEVEN main points that form part of a site meeting agenda, other than opening, welcome and closing. (7)
- 6.2 Name THREE things that will measure that work on site is efficient. (3)
- 6.3 List FIVE duties of a clerk of works. 🧐 (5)
- 6.4 Briefly describe what the term *extra over* in the Bill of Quantities means. (4)
- [19]**

QUESTION 7

The measurements for levelling a playground is given below.

The distance and the depth of the cross-section area of a ground is given. All dimensions are in meters.

If the length of the ground is 50 meters, calculate if there is any excess ground to be carted away after filling and if any, how many m³.

**[12]****TOTAL: 100**