higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

MARKING GUIDELINE

NATIONAL CERTIFICATE (VOCATIONAL)

CONSTRUCTION PLANNING
NQF LEVEL 4

15 November 2024

This marking guideline consists of 6 pages.

Copyright reserved

QUESTION 1

1.1
- Civil engineer
- Electrical engineer
- Mechanical engineer
- Land surveyor
- Health and safety consultant
- Project manager
- Architect
- Quantity surveyor
- Fire consultant
- Environmental consultant (Any 5 × 1) (5)

1.2
- All parties should remember what to do.
- All parties should know what is expected of them.
- Other experts who help in the project can use the contract.
- Disagreements can be resolved by looking at written contracts.
- Contracts can be used to resolve conflict.
- All parties sign the contract.
- Everyone's responsibilities are documented.
- Contracts can be used in a court of law if there are serious disagreements.

(Any 4 × 1) (4)

1.3 1.3.1 Interim payments are the payments being paid to the contractor as per the signed conditions of the contract.✓ In most cases this will be monthly.✓

1.3.2 Retention money – This is the amount of money withheld from the interim payments, normally 5% as stipulated in the signed conditions of contract.✓ It is held back by the client to make good any defects by the contractor.✓

(2 × 2) (4)

1.4
- The contractor prepares the final account and hands it to the employer who will verify the amount.
- The employer pays the final account less the retention amount. (2)

[15]

QUESTION 2

2.1 The landowner has the right to claim for damages✓ and has the right to become the new legal owner of the structure.✓ The landowner has the right to charge the contractor✓ and has no obligation to pay for any costs incurred by the contractor.✓ (4)

Copyright reserved

2.2 2.2.1 True
2.2.2 True
2.2.3 True
2.2.4 False
2.2.5 True
2.2.6 False

(6 × 1) (6)
[10]

QUESTION 3

3.1
- The client to handover the site in order for the project to commence on time.
- Agreement on the quality and standard of the work at an early date.
- That all queries and disputes be expedited urgently
- To be granted extensions of the contract practical completion date based on claims that are reasonable and agreed as per the condition of contract.
- To be paid for all changes to the contract base on the issuing of signed variation orders
- Regular payment by the client/employer to the contractor.

(Any 4 × 1) (4)

3.2 3.2.1 Main contractor
3.2.2 Subcontractor
3.2.3 Non-nominated subcontractor

(3 × 1) (3)

3.3
- Site diary
- Minutes of meetings
- Bar chart/Programme
- Photographic details

(Any 3 × 1) (3)
[10]

QUESTION 4

4.1 4.1.1 Labour only contracts: These contracts are often used for small jobs.✓ The employer buys all the material and the contractor only has to provide the labour.✓

4.1.2 Open advertised tender: These tenders are open to all qualified bidders and are publically advertised.✓ Except under exceptional circumstances all government work is tendered this way.✓

4.1.3 Restricted tender: A client from the private sector chooses a number of contractors whom he would like to tender✓ on his project and only invites these people to tender.✓

4.1.4 Day works contracts: This is an agreement between parties on the hours of work done by each man and the materials used.✓ The contractor is paid for the labour and materials plus an agreed percentage for overheads and profits.✓

4.1.5 Lump sum contracts: These tenders are used where there is a lot of uncertainty because the site conditions have not been investigated✓ or because the contract documents are not detailed enough for the tenderer to make a proper submission.✓

(5 × 2) (10)

4.2 The tenderer must submit a realistic price.✓ There must be proper tender documents.✓ There must be a proper written description of the scope of the works.✓ The contractors all risks and obligations must be observed.✓ The tender must have a realistic validity period.✓ (4)

4.3 Value-added tax (1)

[15]

QUESTION 5

5.1 Two windows will be required (1)

5.2 Two door openings are shown (1)

5.3 2 x 10,000✓ + 2 x 6,500✓ = 33,000 m ✓ **or 33 m** (3)

5.4 Area of Deductions of all openings:

Window 1 = W × H
= 1,800 X 1,200 × 1✓
= 2,16 m²✓

Window 2 = W × H
= 1,400 × 1,400 × 1✓
= 1,96 m²✓

TOTAL AREA OF WINDOW OPENINGS = 2,16 m² + 1,96 m²✓
= 4.12 m²✓

Door 1 = W × H
= 0,9 × 2,1✓
= 1,89 m²✓

Door 2 = W × H
= 1,8 × 2,1✓
= 3,78 m²✓

TOTAL AREA OF DOOR OPENINGS = 1,89 m² + 3,78 m²
= 5,67 m²✓

TOTAL AREA FOR ALL DEDUCTIONS = 4,12 m² + 5.67 m²
= 9,79 m²✓ (12)

5.5 Round off to next whole brick.
TOTAL AREA FOR ALL DEDUCTIONS= 9,79 m²✓ × 110✓
= 1076,9,
= 1077 bricks✓
(Alternate relevant calculations accepted) (3)
[20]

QUESTION 6

6.1 Critical activity is one that cannot be delayed,✓ if delayed it would affect the end date of the construction project,✓ whereas non-critical activity is one that can be delayed✓ and if delayed it will not affect the end date of the construction project.✓ (4)

6.2 6.2.1
- The contractor fences off the site✓
- Provide containers and storage facilities✓
- Provide canteen and changing facilities✓
- Erect temporary toilet✓
- Install telephone lines ✓

(5)

6.2.2
- Fit wall plates✓
- Erect roof trusses✓
- Align roof trusses✓
- Fix all bracing✓
- Anchor roof trusses ✓

(5)

6.2.3
- Lay out damp proof course✓
- Set up external door frames✓
- Build up external walls to window sill height✓
- Set up internal door frames✓
- Build all walls up to wall plate height ✓

(5)

6.3 Non-critical activity (1)
[20]

Copyright reserved

QUESTION 7

7.1
- Injects a working capital when starting the business.
- Purchases materials using a credit card.
- Pays labourers monthly instead of weekly.
- Negotiates interim payments.
- Uses bridging finance.
- Uses a bank overdraft. (Any 5 × 1) (5)

7.2
- The project is completed sooner, so that the client can take over building sooner. This means that the building is in use and generating money much sooner than if the project had been done in the normal sequential order.
- The contractor must often employ more people to do the job faster, so more employment opportunities are created.
- The contractor gets his final payment sooner
- The contractor can move onto his next project faster, if he has another job lined up.
- Materials and labour costs don't go up as much over a shorter period (5)

[10]

TOTAL: 100

Copyright reserved