higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

MARKING GUIDELINE

NATIONAL CERTIFICATE (VOCATIONAL)

MASONRY
NQF LEVEL 4

17 November 2022

This marking guideline consists of 6 pages.

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QUESTION 1

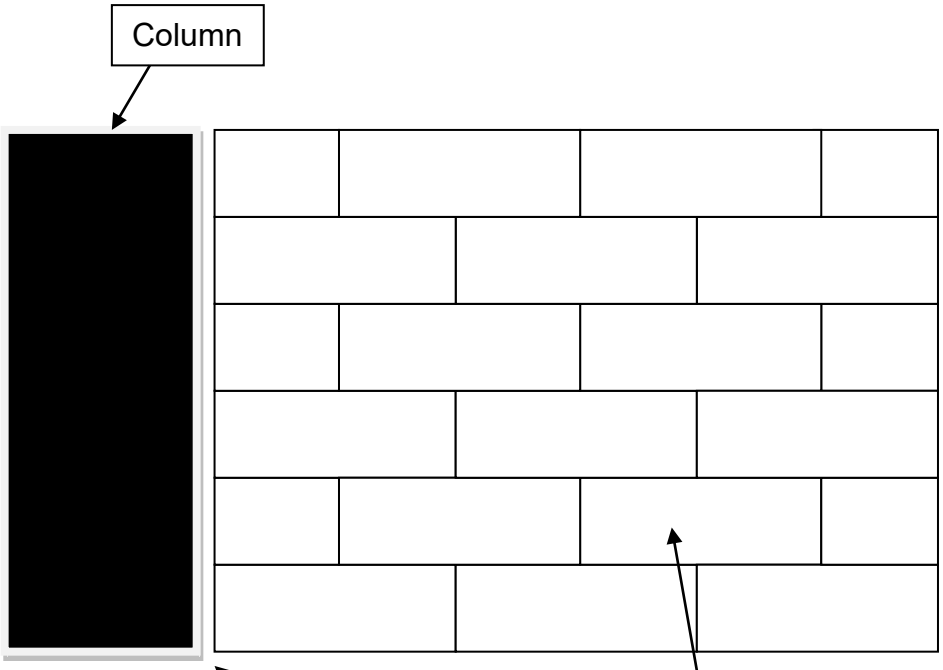
1.1 False
1.2 False
1.3 True
1.4 True
1.5 False
1.6 False
1.7 True
1.8 True
1.9 True
1.10 True

(10 × 1) **[10]**

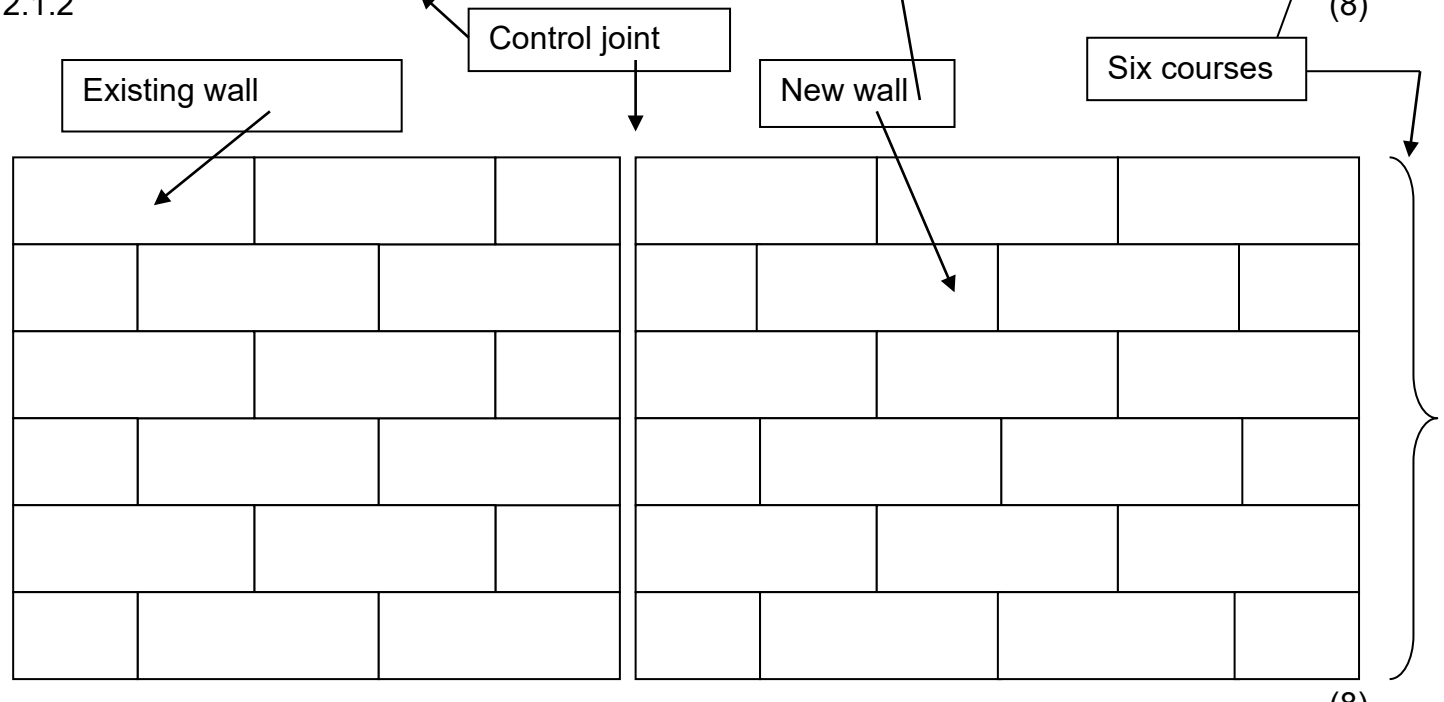
QUESTION 2

2.1

2.1.1



2.1.2 (8)



(8)

Distribution of marks: 2.1.1

Correctness	3
Control joint	2
Labeling	2
Brickwork	1
TOTAL	8

Distribution of marks 2.1.2

Correctness	3
Control joint	2
Labeling	2
Brickwork	1
TOTAL	8

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2.2 2.2.1 A wall can be plastered 28 days after completion. (1)

2.2.2 The reason for this is that the wall has to harden before it can be plastered. (2)

2.3 2.3.1 Perpend
2.3.2 Substrate
2.3.3 Presoaked
2.3.4 Shuttering
2.3.5 Bush brush

(5 x 1) (5)

2.4
- If the substrate is too dry, it should be presoaked.
- The best way of doing this is to spray a fine mist of water on the substrate.
- If the water pressure is too strong, the mortar between the layers of brick may be dislodged.
- Make sure the whole area of the substrate is evenly sprayed.
- Continue spraying until the water is no longer absorbed into the substrate. (5)

2.5 Deviations of less than 10 mm will not affect the adhesion or strength of the plaster coat. (1)

[30]

QUESTION 3

3.1 Concrete is floated to:
- Embed stones just beneath the surface
- Remove slight humps and ridges and fill in small cavities to produce a flat surface
- Remove marks left by edging and jointing
- Compact concrete at the surface (4)

3.2
- BRE screed test
- Cube test
- Gentle tapping test
- Foot-imprint test (4)

3.3 The datum level or site datum is the fixed level on the building site or construction project. (2)

3.4
- An intercoat or slush coat is a rich layer of sand, cement and water mix
- used to form a bonding layer between the base slab and the screed or topping. (2)

3.5
- It embeds the coarse aggregate (stone) at the surface.
- It provides a surface smooth enough for trowelling.
- It compacts the surface for subsequent operations such as painting or tiling. (3)

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3.6
- Place a 3 m long straight edge on two masonry units of exactly the same size.
- Take a second straight edge of the same length.
- Place the one end of the second straight edge next to the first straight edge.
- The other end of the second straight edge should be free to move up and down.
- Place a spirit level on the free end of the second straight edge and lift the straight edge (or lower it) until it is level.
- Measure the distance between the top of the first straight edge and the top of the second straight edge.
- Measure this at the end where the spirit level is.
- If the measure is acceptable, repeat and then check a metre from where you first checked the level.
- Repeat the checks until you are sure that the whole area is level
- or that the deviations are no bigger than specified on the contract. (10)

3.7
- Form a layer of water on the surface of a slab which is called ponding.
- Spray water on the surface continuously
- and place wet sand or sacking on the concrete. (3)

3.8
- At the edge of a dampcourse
- Next to column
- Where the substrate has been laid in sections (Any 2 × 1) (2)

[30]

QUESTION 4

4.1 4.1.1 Rubber mallet: To tap the tiles firmly into the adhesive.

4.1.2 Chalk line: During marking out straight and accurate tile reference lines.

4.1.3 Tile file: To smooth off the sharp edges on cut tiles.

4.1.4 Grout squeegee: to apply and smooth out grout.

4.1.5 Tile spacers: To ensure that the tiles are laid the correct distance apart and that there are straight lines between the tiles.

(5 × 2) (10)

4.2 To prevent any tile adhesive or grout from getting into the waste system (2)

4.3
- Visual inspection✓ is the primary tool for inspecting plasterwork – Simply looking can often reveal cracks, popping, grinning or other defects.✓
- Tapping the surface✓ can reveal loose plaster and areas of moisture.✓
- Pressing the surface✓ can show where detachment (debonding) has occurred by the springiness of the surface.✓
- Tap the plaster with a blunt object✓ – The trained ear can hear the hollow-sounding of areas that have defects in the plasterwork.✓ (4 × 2) (8)

4.4 Remove organic growth by killing the spores with a fungicide, for example household bleach. (2)

4.5 4.5.1
- Once the substrate is prepared, prime the area with a primer and bonding agent.
- Use a builder's brush to apply a layer that is 2 mm thick.

4.5.2 Allow the layer to dry for 24 hours before laying the tiles.
(2 × 2) (4)

4.6
- Glass is by its nature smooth✓, therefore the tile adhesive used for glass mosaics will need a key for bonding✓.
- Conventional adhesives do not bond to a smooth surface✓✓. (4)

[30]

TOTAL: 100

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