



**higher education
& training**

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

MARKING GUIDELINE

NATIONAL CERTIFICATE (VOCATIONAL)

NOVEMBER EXAMINATION 2011

**MASONRY
NQF LEVEL 2**

18 NOVEMBER 2011

This marking guideline consists of 5 pages.

SECTION A**QUESTION 1: GENERAL**

- | | | |
|------|---|-------------|
| 1.1 | B | |
| 1.2 | C | |
| 1.3 | D | |
| 1.4 | B (A, B, & C) any one | |
| 1.5 | A (B is correct answer) | |
| 1.6 | A | |
| 1.7 | A | |
| 1.8 | D Question confusing student get one mark | |
| 1.9 | C (B or C) | |
| 1.10 | D | [10] |

QUESTION 2: INTRODUCTION AND BACKGROUND

- | | | |
|-----|---|------------|
| 2.1 | Reinforcing (Question confusing student get one mark) | (1) |
| 2.2 | English bond | (1) |
| 2.3 | Control joint | (1) |
| 2.4 | Crimp wire | (1) |
| 2.5 | Wall tie (Question confusing student get one mark) | (1) |
| 2.6 | Bonded wall | (1) |
| 2.7 | Cavity wall | (1) |
| 2.8 | Garden wall bond | (1) |
| | | [8] |

QUESTION 3: SETTING OUT MASONRY WALL

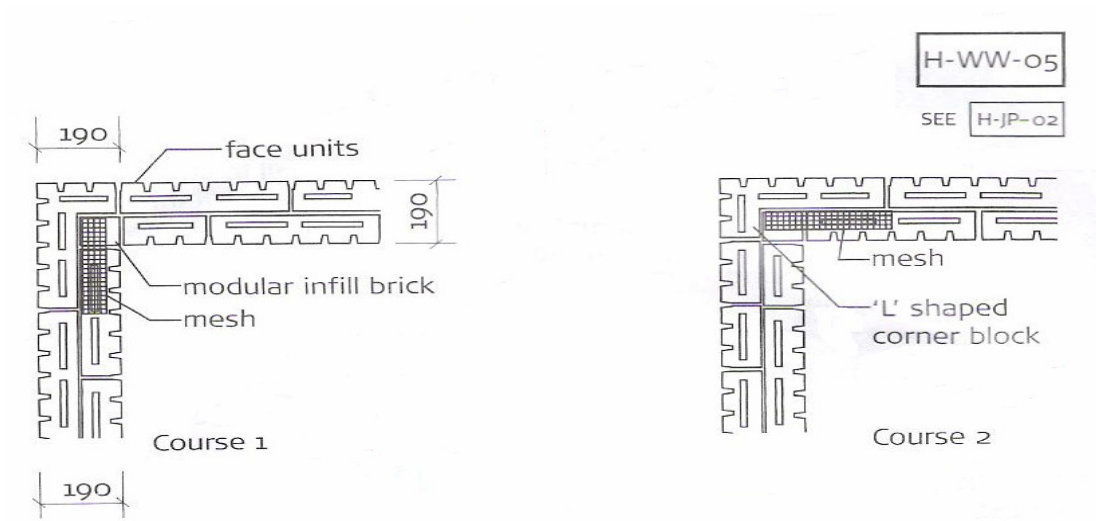
- | | | |
|-----|--|-----|
| 3.1 | The importance of the drawing is to show exactly what materials should be used in the building and where all the doors and windows must be, as well as information for the electricians and plumbers and any other contractors who will be needed on site. | (4) |
| 3.2 | <ul style="list-style-type: none"> • Tape measure • Builders line • Straight edge • Steel square • Optical square • Any relevant tool | (4) |
| 3.3 | A Pointing trowel - : you used it to separate concrete from the forms it is poured into, for finishing joint in the bricks walls, and for spreading material in tight spots. | (1) |
| | B Gauging trowel -: used for gauging, or mixing in specified proportions, small amount of quick set plaster. | (1) |

- C Raking tool - : to neaten the mortar between two masonry units (1)
- D Chalk **line** - : to draw straight lines. (1)
- E Hawk - : to hold the plaster before you spread it onto the wall by using the float. (1)
- F Straight edge - : to check for flatness at different surfaces. (1)
- (any relevant answer)
- 3.4 A Place a 3 m long straight edge on two masonry units exactly the same size.
- B Take a second straight edge of the same length place the one end of one of the masonry units next to the first spirit level. The other should be free to lift up or down.
- C Place a level on the free end and lift the straight edge, or lower it, until it is level.
- D Measure the distance between the top of the first straight edge and the top of the second straight edge. Do so at the end where the level is.
- E If the distance is bigger than 6mm, the foundations should be levelled before you carry on working. (5)
- 3.5 3.5.1 Plaster is a mixture of cement (or **lime**) sand and water that is applied as a liquid paste to the internal walls of a building and dries to a smooth hard surface. (2)
- 3.5.2 Short metal pole with a sharp point that is driven into the ground to mark something . **and or wooden pole** (2)
- 3.6 Tool should be cleaned and wiped every time after use. (2)
- (any relevant answer) [25]

QUESTION 4: BASIC CONSTRUCTION OF MASONRY WALLS

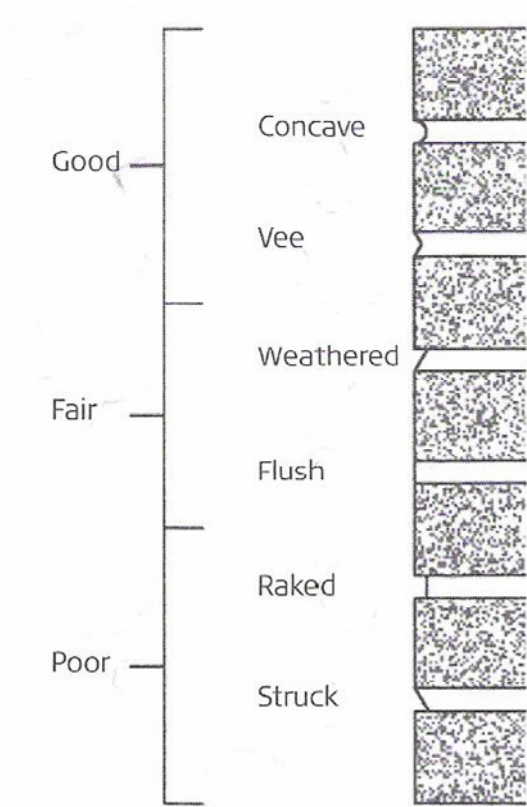
- 4.1 4.1.1 DPC is placed in a wall to prevent moisture/damp to penetrate in the walls made of plastic. (**or malthoid**) (2)
- 4.1.2 DPM is place under the concrete slab while DPC is place in a wall. (2)
- 4.2
- Bottom of the wall above ground level
 - Below window sill
 - Above window openings
 - Above the door
 - Below door frame
 - At door and window jambs (6)

4.3



(6)

4.4



(9)
[25]

QUESTION 5: ADVANCED CONSTRUCTION OF MASONRY WALLS

- 5.1 5.1.1 True
 5.1.2 True
 5.1.3 False
 5.1.4 True
 5.1.5 False (5)
- 5.2 • Standard lintel block
 • Standard bond block
 • Bond block (3)
- 5.3 One way of reinforcing walls at control joints, is to reinforce both sides and to have no reinforcement across the gap. But at times we have to reinforce across the gap. (2)
- 5.4 • Galvanised steel wire.hurricane brackets
 • Metal strap / or hoop iron (2)
- 5.5 Is a beam in which two or more different materials are jointed together, they are stronger than the two materials are on their own. (3)
- 5.6 Roof plans specify the type of roof anchors to be used and indicate the position of roof anchors to ensure the best load carrying capacity. (2)
 (any relevant answer)
- 5.7 An anchor is used for tying metal straps to masonry, concrete or at wall, concrete, wall/wall, and wall steel interactions. (3)
- 5.8 • Fibre board
 • Polystyrene or polyurethane strips,
 • Sponges,
 • Tubes or rods Any THREE (3)
 (any relevant answer)
- 5.9 5.9.1 key stone
 5.9.2 extrados (outside)
 5.9.3 springing line
 5.9.4 centering (also referred to as arch soffit support)
 5.9.5 voussors
 5.9.6 intrados (inside)
 5.9.7 first brick in arch (Springer) (7)
- 5.10 You will be held accountable for any injury and be forced by the law to pay any damages. (2)

[32]**TOTAL: 100**