

# Mark Scheme

Principal Learning

## Sample Assessment Material CB204 Construction and the Built Environment Level 2 Unit 4: Create the Built Environment: Structures

| Question Number | Answer                                                                                                                                               | Mark |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| 1               | (i) Excavation and earthworks<br>(ii) Internal walls and partitions<br>(iii) First fix<br>(iv) Finishes and decorations<br>(v) Snagging and handover | (5)  |

| Question Number | Answer                                                                                    | Mark |
|-----------------|-------------------------------------------------------------------------------------------|------|
| 2               | (i) in-situ<br>(ii) prefabrication<br>(iii) time<br>(iv) quality control<br>(v) community | (5)  |

| Question Number | Answer                                                                                       | Mark |
|-----------------|----------------------------------------------------------------------------------------------|------|
| 3               | (i) brickwork<br>(ii) sand cement screed<br>(iii) concrete<br>(iv) blockwork<br>(v) hardcore | (5)  |

| Question Number | Answer                                                                                                                                                                                                                                                       | Mark |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| 4               | (i) Allows internal flexibility - frame<br>(ii) Walls are loadbearing - cellular<br>(iii) Can be clad in a variety of external finishes - frame<br>(iv) Can be used with a raft foundation - both<br>(v) Always requires the installation of piles - neither | (5)  |

| Question Number | Answer                                                                                         | Mark |
|-----------------|------------------------------------------------------------------------------------------------|------|
| 5               | (i) performance<br>(ii) workmanship<br>(iii) measurement<br>(iv) SMM7<br>(v) quantity surveyor | (5)  |

| Question Number | Answer                                                                            | Mark |
|-----------------|-----------------------------------------------------------------------------------|------|
| 6               | (i) frame<br>(ii) prefabricated<br>(iii) crane<br>(iv) foundations<br>(v) holding | (5)  |

| Question Number | Answer                                                                         | Mark |
|-----------------|--------------------------------------------------------------------------------|------|
| 7               | (i) roof tiles<br>(ii) rafter<br>(iii) wall plate<br>(iv) soffit<br>(v) fascia | (5)  |

| Question Number | Answer                                                                                           | Mark |
|-----------------|--------------------------------------------------------------------------------------------------|------|
| 8               | (i) lining<br>(ii) plasterwork<br>(iii) drying time<br>(iv) trussed rafters<br>(v) prefabricated | (5)  |

| Question Number | Answer                                                        | Mark |
|-----------------|---------------------------------------------------------------|------|
| 9               | (i) lintel<br>(ii) bund wall<br>(iii) air brick<br>(iv) mixer | (4)  |

| Question Number | Answer                                                 | Mark |
|-----------------|--------------------------------------------------------|------|
| 10              | (i) 1:50<br>(ii) 1:5<br>(iii) BS1192<br>(iv) materials | (4)  |

| Question Number | Answer                                                              | Mark |
|-----------------|---------------------------------------------------------------------|------|
| 11              | (i) - Detail A<br>(ii) - Both<br>(iii) - Detail B<br>(iv) - Neither | (4)  |

| Question Number | Answer                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Mark |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| 12              | Possible advantages could include any 4 on the following: <ul style="list-style-type: none"> <li>• Bills of quantities are measured in a standard way</li> <li>• Bills of quantities give the quantity of items to be priced</li> <li>• Bills of quantities mean all contractors are tendering on the same quantities and work items</li> <li>• Bills of quantities make it easier for the Client's representative to compare tender prices</li> </ul> |      |

|  |                                                                                                                                                                                                     |     |
|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
|  | <ul style="list-style-type: none"> <li>• Bills of quantities can be used for accurate monthly valuations</li> <li>• Bills of quantities can be used for trade or elemental cost analysis</li> </ul> | (4) |
|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|

| Question Number | Answer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Mark |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| 13              | <p>Possible advantages could include any 4 of the following:</p> <ul style="list-style-type: none"> <li>• Detail one is constructed to higher insulation standards because it has insulated blocks, additional cavity insulation and a second cavity formed by the dry-lining</li> <li>• Detail one will perform better than detail two in exposed conditions because the bricks are denser and have a much higher resistance to rain penetration</li> <li>• Detail one is built in a mortar that is more suitable for exposed conditions because it has a better resistance to frost</li> <li>• Detail one has weathered joints which provide a better resistance to rain penetration</li> <li>• Detail one can be decorated earlier than detail 2 because there is little drying time needed for the internal surfaces</li> </ul> | (4)  |