

Mark Scheme (Results)

January 2013

Principal Learning
Construction and the Built
Environment

Create the Built Environment:
Structures (CB204/01)

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General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

Question Number	Answer	Mark
1(a)	C – task	(1)

Question Number	Answer	Mark
1(b)	E – bar	(1)

Question Number	Answer	Mark
1(c)	B – duration	(1)

Question Number	Answer	Mark
1(d)	A – sequencing	(1)

Question Number	Answer	Mark
1(e)	A – gantt chart	(1)

Question Number	Answer	Mark
2(a)	C – mini excavator	(1)

Question Number	Answer	Mark
2(b)	D – concrete	(1)

Question Number	Answer	Mark
2(c)	D – poker vibrator	(1)

Question Number	Answer	Mark
2(d)	B – compactor	(1)

Question Number	Answer	Mark
2(e)	C – rig	(1)

Question Number	Answer	Mark
3(a)	C – joist hanger	(1)

Question Number	Answer	Mark
3(b)	B – chipboard	(1)

Question Number	Answer	Mark
3(c)	C – skirting board	(1)

Question Number	Answer	Mark
3(d)	A – insulation	(1)

Question Number	Answer	Mark
3(e)	A – wall tie	(1)

Question Number	Answer	Mark
4(a)	C – column	(1)

Question Number	Answer	Mark
4(b)	B – base plate	(1)

Question Number	Answer	Mark
4(c)	A – bolt	(1)

Question Number	Answer	Mark
4(d)	B – cone	(1)

Question Number	Answer	Mark
4(e)	D – grout	(1)

Question Number	Answer	Mark
5(a)	D – on-site waste	(1)

Question Number	Answer	Mark
5(b)	E – contract duration	(1)

Question Number	Answer	Mark
5(c)	C – environmental impact	(1)

Question Number	Answer	Mark
5(d)	D – foundations	(1)

Question Number	Answer	Mark
5(e)	A – insulation levels	(1)

Question Number	Answer	Mark
6(a)	C – recycling skip	(1)

Question Number	Answer	Mark
6(b)	B – wheel wash	(1)

Question Number	Answer	Mark
6(c)	C – silo mixed materials	(1)

Question Number	Answer	Mark
6(d)	C – regular maintenance	(1)

Question Number	Answer	Mark
6(e)	C – carbon emissions	(1)

Question Number	Answer	Mark
7(a)	Requires pad foundations – Steel portal frame	(1)

Question Number	Answer	Mark
7(b)	Requires a crane during erection – Both	(1)

Question Number	Answer	Mark
7(c)	Requires mobile elevated platforms to erect – Steel portal frame	(1)

Question Number	Answer	Mark
7(d)	Requires scaffolding during erection – Domestic timber frame	(1)

Question Number	Answer	Mark
7(e)	Requires grouting after erection – Steel portal frame	(1)

Question Number	Answer	Mark
8(a)	F – contingency sum	(1)

Question Number	Answer	Mark
8(b)	B – daywork rates	(1)

Question Number	Answer	Mark
8(c)	D – general conditions	(1)

Question Number	Answer	Mark
8(d)	B – provisional sum	(1)

Question Number	Answer	Mark
8(e)	E – prime cost sum	(1)

Question Number	Answer	Mark
9(a)	D – level	(1)

Question Number	Answer	Mark
9(b)	F – plumb	(1)

Question Number	Answer	Mark
9(c)	C – stability to walls	(1)

Question Number	Answer	Mark
9(d)	B – breather membrane	(1)

Question Number	Answer	Mark
10(a)	B – damp proof membrane	(1)

Question Number	Answer	Mark
10(b)	F – screed	(1)

Question Number	Answer	Mark
10(c)	A – earth	(1)

Question Number	Answer	Mark
10(d)	F – hardcore	(1)

Question Number	Answer	Mark
11(a)	Requires formwork on-site – Insitu concrete	(1)

Question Number	Answer	Mark
11(b)	Crane required – Both	(1)

Question Number	Answer	Mark
11(c)	Requires welding – Neither	(1)

Question Number	Answer	Mark
11(d)	Requires on-site curing time – Insitu concrete	(1)

Question Number	Answer	Mark
12	<ul style="list-style-type: none"> • Use of email in communication • Use of spreadsheets in financial control • Use of digital imagery in progress monitoring • Use of word processing in recording meeting minutes • Use of the internet to create a virtual project • Use of specific planning software eg Microsoft Project • Use of estimating software for tendering • Use of integrated accounts packages • Use of CAD for as built drawings • Use of Bills of Quantities production software • Use of measurement software package <p>Any other appropriate answer</p> <p>No marks for identification only 1 mark for a simple description of each part 2 marks for a more detailed description of each part</p>	(4)

Question Number	Answer	Mark
13	<p>A description of one of the following</p> <p>Advantages</p> <ul style="list-style-type: none"> • Speed • Sound resistance • Fire protection • Spans • Strength • No wastage • Provides immediate working platform • Provides thermal mass • Easier to incorporate underfloor heating • Provides a void to run services • Limited hygroscopic movement • Limited deflection • Resistance to moisture • Additional treatment is not required <p>Any other appropriate answer</p> <p>No marks for identification only 1 mark for a simple description of each part 2 marks for a more detailed description of each part</p>	(4)

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