

# Mark Scheme (Results)

January 2012

Principal Learning  
CB204 Create the Built Environment:  
Structures

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Question Number	Answer	Mark
<b>1(a)</b>	C - General Public	<b>(1)</b>

Question Number	Answer	Mark
<b>1(b)</b>	C - 6	<b>(1)</b>

Question Number	Answer	Mark
<b>1(c)</b>	B - I	<b>(1)</b>

Question Number	Answer	Mark
<b>1(d)</b>	E - Week 3 Day 4	<b>(1)</b>

Question Number	Answer	Mark
<b>1(e)</b>	C - 16 days	<b>(1)</b>

Question Number	Answer	Mark
<b>2(a)</b>	C - Backactor	<b>(1)</b>

Question Number	Answer	Mark
<b>2(b)</b>	D - Power floating	<b>(1)</b>

Question Number	Answer	Mark
<b>2(c)</b>	C - Dumper	<b>(1)</b>

Question Number	Answer	Mark
<b>2(d)</b>	A - Steel reinforcement	<b>(1)</b>

Question Number	Answer	Mark
<b>2(e)</b>	C - Compaction	<b>(1)</b>

Question Number	Answer	Mark
<b>3(a)</b>	C - Shell	<b>(1)</b>

Question Number	Answer	Mark
<b>3(b)</b>	B - Cross wall	<b>(1)</b>

Question Number	Answer	Mark
<b>3(c)</b>	D - Cellular	<b>(1)</b>

Question Number	Answer	Mark
<b>3(d)</b>	B - Frame	<b>(1)</b>

Question Number	Answer	Mark
<b>3(e)</b>	C - Skeleton	<b>(1)</b>

Question Number	Answer	Mark
<b>4</b>	Domestic time framed - Brickwork Portal frame - Both Insitu concrete - Both Cavity wall construction - Brickwork Cross wall construction - Brickwork	<b>(5)</b>

Question Number	Answer	Mark
<b>5(a)</b>	A - Site Noise	<b>(1)</b>

Question Number	Answer	Mark
<b>5(b)</b>	C - Period	<b>(1)</b>

Question Number	Answer	Mark
<b>5(c)</b>	D - Decommissioned	<b>(1)</b>

Question Number	Answer	Mark
<b>5(d)</b>	D - Recycled	<b>(1)</b>

Question Number	Answer	Mark
<b>5(e)</b>	E - Insulation	<b>(1)</b>

Question Number	Answer	Mark
<b>6(a)</b>	D - Galvanised steel lintel	<b>(1)</b>

Question Number	Answer	Mark
<b>6(b)</b>	E - Cavity tray	<b>(1)</b>

Question Number	Answer	Mark
<b>6(c)</b>	D - Weep hole	<b>(1)</b>

Question Number	Answer	Mark
<b>6(d)</b>	B - Reveal	<b>(1)</b>

Question Number	Answer	Mark
<b>6(e)</b>	B - Wall tie	<b>(1)</b>

Question Number	Answer	Mark
<b>7</b>	Supervision - Preliminaries Unidentified work - Dayworks Nominated subcontractor - Prime Cost Sums External walls - Measured Works Contingencies - Provisional Sums	<b>(5)</b>

Question Number	Answer	Mark
<b>8(a)</b>	E - Plastering	<b>(1)</b>

Question Number	Answer	Mark
<b>8(b)</b>	B - Cranes	<b>(1)</b>

Question Number	Answer	Mark
<b>8(c)</b>	E - On-site labour costs	<b>(1)</b>

Question Number	Answer	Mark
<b>8(d)</b>	B - Quality Control	<b>(1)</b>

Question Number	Answer	Mark
<b>8(e)</b>	F - Drying Time	<b>(1)</b>

Question Number	Answer	Mark
<b>9(a)</b>	F - Rafter	<b>(1)</b>

Question Number	Answer	Mark
<b>9(b)</b>	C - Framing	<b>(1)</b>

Question Number	Answer	Mark
<b>9(c)</b>	B - Bonded	<b>(1)</b>

Question Number	Answer	Mark
<b>9(d)</b>	E - Sets	<b>(1)</b>

Question Number	Answer	Mark
<b>10(a)</b>	B - Stone	<b>(1)</b>

Question Number	Answer	Mark
<b>10(b)</b>	B - Side hung	<b>(1)</b>

Question Number	Answer	Mark
<b>10(c)</b>	E - DPC	<b>(1)</b>

Question Number	Answer	Mark
<b>10(d)</b>	E - Wood sawn	<b>(1)</b>

Question Number	Answer	Mark
<b>11</b>	Production of Gantt charts - Package B Production of walkthroughs - Package A Production of video images - Neither Production of critical path analysis - Package B	<b>(4)</b>

Question Number	Answer	Mark
<b>12</b>	<ul style="list-style-type: none"> <li>• Protective fencing</li> <li>• Correct storage of materials</li> <li>• Use of silt traps</li> <li>• Local sourcing</li> <li>• Damping down</li> <li>• Waste segregation</li> <li>• Correct fuel storage</li> <li>• Recycle materials</li> <li>• Relocation of animal habitats</li> <li>• Bunded tanks</li> <li>• Regular and correct maintenance of site plant</li> <li>• Use of pre-fabrication minimises the time the project impacts upon the environment</li> <li>• Development of brownfield sites</li> <li>• Protecting existing retained trees and any other reasonable answer</li> </ul>	

	No marks for identification only 1 mark for a simple description 2 marks for a more detailed description (The above applies to a maximum of 2 described practices)	(4)
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Question Number	Answer	Mark
13	<p>A description and evaluation of one of the following</p> <p>Advantages</p> <ul style="list-style-type: none"> <li>• Aesthetics</li> <li>• Can be used for solar gain</li> <li>• Glass can be coloured</li> <li>• Maximizes natural light use</li> <li>• Faster method of closing external envelope</li> <li>• Low maintenance</li> <li>• Lighter weight</li> <li>• Can be curved</li> <li>• Attractive at night</li> <li>• Requires no secondary coating</li> <li>• Provides additional protection from the elements</li> <li>• Provides additional sound reduction</li> <li>• Provides additional thermal properties</li> </ul> <p>Disadvantages</p> <ul style="list-style-type: none"> <li>• Causes glare</li> <li>• Cleaning</li> <li>• Privacy</li> <li>• Weight</li> <li>• Crainage</li> <li>• Solar gain in summer</li> <li>• Specialist transport required</li> <li>• High wind installation impossible</li> <li>• Short life expectancy on double glazed units</li> <li>• Sealing of units requires special detailing</li> <li>• Thermal expansion</li> <li>• Expensive to curve</li> <li>• More expensive than brickwork</li> <li>• Potential impact damage / breakage</li> <li>• High cost</li> </ul> <p>and any other reasonable answer</p> <p>Additional No marks for any identification 1 mark for a brief description of one advantage</p>	(4)

	<p>or one disadvantage</p> <p>2 marks for a brief description containing one advantage and one disadvantage</p> <p>3 marks for describing two but only one evaluative</p> <p>4 marks for a clear evaluative description of one advantage and one disadvantage</p>	
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