

AN ROINN OIDEACHAIS AGUS EOLAÍOCHTA

LEAVING CERTIFICATE EXAMINATION, 2002



Staidéar Foirgníochta

Teoiric - Ardleibhéal

Construction Studies

Theory - Higher Level

SCÉIM MHARCÁLA

MARKING SCHEME

CEIST 1

PERFORMANCE CRITERIA	MAXIMUM MARK
Reinforced concrete strip foundation correctly shown	6
Correct depth of trench correctly shown (graphically or otherwise)	6
Cavity wall, cavity fill correctly shown	6
Cavity insulation correctly shown	6
DPC in cavity wall correctly shown	6
Fireback correctly shown	6
Fireplace lintel correctly shown	6
Flue gathering correctly shown	6
Flue liner correctly shown	6
Fill to flue liner & fireback correctly shown	6
Hardcore & deadwork for chimney breast correctly shown	6
DPM & underfloor insulation correctly shown	6
Concrete floor correctly shown	6
External rendering and internal plastering to wall correctly shown	6
Design detail No. 1 correctly shown	6
Design detail No. 2 correctly shown	6
TOTAL <i>Maximum of 8 x 6marks each out of first 14, 5 marks for drawing + 1 for annotation in each case. Maximum of 6 marks for each of 2 applicable design details correctly and accurately indicated on drawing.</i>	60

CEIST 2

PERFORMANCE CRITERIA	MAXIMUM MARK
(a)	
Citing of inadequate insulation/ Description of Cold Bridge	6
Sketch of Cold Bridge or Note describing insulation of head, jamb and cill	6
Sketch of insulation (at head or jamb or cill)	6
(b)	
Reason 1	7
Reason 2	7
Note on Method No. 1	7
Sketch of Method No. 1	7
Note on Method No. 2	7
Sketch of Method No. 2	7
TOTAL	60

CEIST 3

PERFORMANCE CRITERIA	MAXIMUM MARK
(a)	
Strength Property No. 1	6
Strength Property No. 2	6
Design consideration 1, to prevent deterioration over time	6
Design consideration 2, to prevent deterioration over time	6
(b)	
Note Describing Method No. 1	6
Sketch of Method No. 1	6
Note describing Method No. 2	6
Sketch of Method No. 2	6
(c)	
<i>(2 advantages x 6 marks each)</i>	
Advantage, Method 1 (Relevance and clarity)	6
Advantage, Method 2 (Relevance and clarity)	6
TOTAL	60

CEIST 4

PERFORMANCE CRITERIA	MAXIMUM MARK
(a)	
Correct Tabulation	3
Ext. Surface Resistance + Int. Surface Resistance + Cavity	3
6 lines of calculations x 3 marks	3
	3
	3
	3
	3
	3
(b)	
<i>(4 lines of calculations x 3 marks)</i>	
Proposed extension Wall	3
Additional Resistance	3
Resistance of Exp. Stated formula	3
T (thickness of insulation required)	3
(c)	
Note describing Method No. 1	6
Sketch of Method No. 1	6
Note describing Method No. 2	6
Sketch of Method No. 2	6
TOTAL	60

CEIST 5

PERFORMANCE CRITERIA	MAXIMUM MARK
<u>(a)</u>	
Detailed discussion of consideration No. 1	6
Detailed discussion of consideration No. 2	6
Detailed discussion of consideration No. 3	6
<u>(b)</u>	
Dimensioned Sketch 1	8
Relevant Notes	8
Dimensioned Sketch 2	8
Relevant Notes	8
<u>(c)</u>	
Reason 1	5
Reason 2	5
TOTAL	60

CEIST 6

PERFORMANCE CRITERIA	MAXIMUM MARK
<u>(a)</u>	
(i) Definition of Mass	6
Discussion of Mass	6
(ii) Definition of Completeness	6
Discussion of Completeness	6
(iii) Definition of Isolation	6
Discussion of Isolation	6
<u>(b)</u>	
Note of Detail No. 1	6
Sketch of Detail No. 1	6
Note of Detail No. 2	6
Sketch of Detail No. 2	6
TOTAL	60

CEIST 7

PERFORMANCE CRITERIA	MAXIMUM MARK
<u>(a)</u>	
Environmental Consideration 1 Statement / Discussion	10
Environmental Consideration 2 Statement / Discussion	10
Environmental Consideration 3 Statement / Discussion	10
<u>(b)</u>	
Explanation No. 1	5
Sketch No. 1	5
Explanation No. 2	5
Sketch No. 2	5
Explanation No. 3	5
Sketch No. 3	5
<i>(or other relevant points)</i>	
TOTAL	60

CEIST 8

PERFORMANCE CRITERIA	MAXIMUM MARK
(a)	
(i) <i>5 marks each for all 4 of the following correctly shown:</i>	
Decking, Counter battens, drip batten/aluminium	5
Fascia, Soffit, Gutter, Ventilation	5
Wall Plate, D.P.C, Tie Down Straps, Wall Ties	5
300 Cavity wall, Insulation, Rendering, Plastering	5
(ii) <i>5 marks each for 4 of the following correctly shown:</i>	
Lead Flashing, Fillet, Solar Reflective Coating/Chips	5
Covering Felt/Butyl Rubber, Furring Piece, Overhang	5
225x50 Joists, @ 400 c/c, Steel Straps Hangers/Timber bolted to wall/built-in	5
Vapour Barrier, Plaster Board, Skim, Insulation	5
(b)	
(i) Condensation – Ventilation	5
Accept sketch of design detail	5
(ii) Decay, note & sketch	5
Sketch of design detail	5
TOTAL	60

CEIST 9

PERFORMANCE CRITERIA	MAXIMUM MARK
(a)	
Studs @ 400 cts, noggings Sketch, 4 marks Note, 4 marks	8
Sole pieces, DPC Sketch, 4 marks Note, 4 marks	8
Headpieces Sketch, 4 marks Note, 4 marks	8
(b)	
Studs at door Sketch, 3 marks Note, 3 marks	6
Lintel/studs over door Sketch, 3 marks Note, 3 marks	6
(c)	
Advantage No. 1 Relevance, 3 marks Quality of discussion, 3 marks	6
Advantage No. 2 Relevance, 3 marks Quality of discussion, 3 marks	6
Disadvantage No. 1 Relevance, 3 marks Quality of discussion, 3 marks	6
Disadvantage No. 2 Relevance, 3 marks Quality of discussion, 3 marks	6
TOTAL	60

CEIST 10

PERFORMANCE CRITERIA	MAXIMUM MARK
<i>Any 6 points or other relevant points clearly stated and supported by discussion. (5 marks for each point stated and 5 marks for each discussion to a maximum of 60 marks)</i>	
Point No. 1 (Statement 5 marks, Discussion 5 marks)	10
Point No. 2 (Statement 5 marks, Discussion 5 marks)	10
Point No. 3 (Statement 5 marks, Discussion 5 marks)	10
Point No. 4 (Statement 5 marks, Discussion 5 marks)	10
Point No. 5 (Statement 5 marks, Discussion 5 marks)	10
Point No. 6 (Statement 5 marks, Discussion 5 marks)	10
TOTAL	60

CEIST 10 (ALTERNATIVE)

PERFORMANCE CRITERIA	MAXIMUM MARK
(a)	
(i) <i>3 well discussed points in favour of building</i> <i>(marks based on the relevance and cogency of the arguments)</i>	
Argument No. 1	7
Argument No. 2	7
Argument No. 3	7
(i) <i>3 well discussed points in opposition to building</i> <i>(marks based on the relevance and cogency of the arguments)</i>	
Argument No. 1	7
Argument No. 2	7
Argument No. 3	7
(b)	
Planning Guideline 1	6
Planning Guideline 2	6
Planning Guideline 3	6
TOTAL	60