

Write your name here	
Surname	Other names
Edexcel Principal Learning	Centre Number
	Candidate Number
Construction and the Built Environment Level 3 Unit 1: Design the Built Environment: The Design Factors	
Thursday 20 May 2010 – Afternoon Time: 1 hour 30 minutes	Paper Reference CB301/01
You do not need any other materials.	Total Marks

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided
– *there may be more space than you need.*

Information

- The total mark for this paper is 60.
- The marks for **each** question are shown in brackets
– *use this as a guide as to how much time to spend on each question.*

Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.

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Answer ALL questions. Write your answers in the spaces provided.

SECTION A

1 Social and economic factors have a major influence on the design of the built environment.

(a) Describe **two** ways that site location, views and neighbours can influence a project's design.

(4)

1

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(b) Describe **two** ways that employment and the local labour market can influence a project's design.

(4)

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(Total for Question 1 = 8 marks)



2 Artificial lighting plays a significant role in the design of interior and exterior spaces of a building.

Describe **three** functions of artificial lighting that a designer needs to plan for.

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(Total for Question 2 = 6 marks)



3 One of the aims of the Code for Sustainable Homes is:

'the design of developments where people feel safe and secure, where crime and disorder, or the fear of crime, does not undermine quality of life or community cohesion.'

Describe **three** crime reduction measures that could be considered at the design stage for a new home.

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(Total for Question 3 = 6 marks)

TOTAL FOR SECTION A = 20 MARKS



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SECTION B

4 The technique of life cycle costing has a direct relationship with the future maintenance of a building.

Describe **four** measures a designer could take to reduce long term maintenance costs.

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(Total for Question 4 = 8 marks)



5 A designer is considering whether to use a timber frame or brick and block construction for the external walls of a house.

Describe **three** factors that could influence the decision of the designer.

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(Total for Question 5 = 6 marks)



6 Local planning authorities are required to consider if a development has any features that will reduce its environmental impact.

In terms of sustainability, describe and evaluate **two** measures that a designer can use to reduce a development's impact on the environment.

1

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(Total for Question 6 = 6 marks)

TOTAL FOR SECTION B = 20 MARKS



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9

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SECTION C

7 Planning Policy Statement 3 – Housing (PPS3) states:

'Good design is fundamental to the development of high quality new housing, which contributes to the creation of sustainable, mixed communities.'

Describe and evaluate the elements that constitute a good design in terms of a new housing development.

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(Total for Question 7 = 20 marks)

TOTAL FOR SECTION C = 20 MARKS
TOTAL FOR PAPER = 60 MARKS



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