

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**

Wednesday 11 January 2012 – 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.

Turn over ►

P39830A

©2012 Pearson Education Ltd.

5/4/4



**PEARSON**

**Answer ALL questions. Write your answers in the space provided.**

**SECTION A**

**1** (a) Describe **two** methods a project designer could use to reduce traffic speed when designing low speed areas.

**(4)**

1 .....

.....

.....

.....

2 .....

.....

.....

.....

(b) Describe **two** features of a rainwater harvesting system that could be incorporated into a new project at the design stage.

**(4)**

1 .....

.....

.....

.....

2 .....

.....

.....

.....

**(Total for Question 1 = 8 marks)**



2 Describe **three** ways that the availability of land could influence the design and development of new projects.

1 .....

.....

.....

.....

.....

2 .....

.....

.....

.....

.....

3 .....

.....

.....

.....

.....

**(Total for Question 2 = 6 marks)**



**3** Describe **three** benefits of using a sustainable urban drainage system (SUDS).

1 .....

.....

.....

.....

.....

2 .....

.....

.....

.....

.....

3 .....

.....

.....

.....

.....

**(Total for Question 3 = 6 marks)**

---

**TOTAL FOR SECTION A = 20 MARKS**



**SECTION B**

**4** Describe **four** ways that the climate can affect the design of a building.

1 .....

.....

.....

.....

.....

2 .....

.....

.....

.....

.....

3 .....

.....

.....

.....

.....

4 .....

.....

.....

.....

.....

**(Total for Question 4 = 8 marks)**



5 Describe **three** functional requirements to be considered when designing a roof structure.

1 .....

.....

.....

.....

.....

2 .....

.....

.....

.....

.....

3 .....

.....

.....

.....

.....

**(Total for Question 5 = 6 marks)**



6 The construction sector is greatly dependent on changes in the economy.

Explain **three** ways that cyclical periods of boom and bust in the economy can affect construction activity.

1 .....

.....

.....

.....

.....

2 .....

.....

.....

.....

.....

3 .....

.....

.....

.....

.....

**(Total for Question 6 = 6 marks)**

**TOTAL FOR SECTION B = 20 MARKS**







Area with horizontal dotted lines for writing.

**(Total for Question 7 = 20 marks)**

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



**BLANK PAGE**



**BLANK PAGE**



**BLANK PAGE**

