

Examiners' Report/  
Principal Examiner Feedback

January 2012

Principal Learning  
CB301 Design the Built  
Environment: The Design Factors

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## **Level 3 Unit 1 Design the Built Environment: The Design Factors**

### **Q1**

As an introduction to the paper the candidates demonstrated a good understanding of the methods that a project designer can use to reduce traffic speed when designing low speed areas. Popular responses included road humps, electronic speed indicator signs and speed cameras. However, regarding Part (b) a number of candidates described features of a sustainable urban drainage system (SUDS) rather than those of a rainwater harvesting system.

### **Q2**

This question produced a range of responses with most candidates able to describe two of the three ways that the availability of land could influence the design and development of new projects. The majority of answers concentrated on the use of medium and high-rise buildings that can create more floor area on the same footprint and the cost of land affecting the feasibility of a project.

### **Q3**

The range of responses indicated that the majority of candidates have an understanding of the benefits of using a sustainable urban drainage system (SUDS). Most candidates provided a description of two of the three benefits that were required for full marks. Commonly used answers included enhancing the general amenity through an increased recreation value of the waterway or river and reduction of power consumption at the water treatment plant and pumping stations.

### **Q4**

The answers showed that the candidates have a good understanding of the ways that climate can affect the design of a building. Popular responses included the orientation of the building allowing the penetration of sunlight into rooms at different times of the day; the design of vulnerable external such as the roof and extreme cold climates requiring higher levels of thermal insulation.

### **Q5**

Generally, the candidates produced clear descriptions of two of the three functional requirements of a roof structure that were needed to obtain full marks. The most popular responses included resistance to weather, predominately rain and snow; resistance to the passage of heat and the ability to shed rainwater.

### **Q6**

The majority of candidates' responses suggested they have a good understanding of the ways that cyclical periods of boom and bust in the economy can affect construction activity. Most candidates provided detailed explanations of two of the three ways that were required to achieve full marks. Popular responses included fluctuations in demand for new private and social housing, commercial/industrial buildings; fluctuations in tender

prices and fluctuations in the cost of land.

**Q7**

Candidates were expected to produce a coherent and balanced discussion of the key components of the Decent Homes Programme. However, a number of responses mistakenly discussed the criteria suggested in the Building for Life initiative. The remaining candidates tended to provide clear descriptions of features of the Decent Homes Programme including a reasonable state of repair and modern facilities such as kitchens and bathrooms.

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