### 6720-048 and 548 June 2018

**6720-36 Advanced Technical Extended Diploma in Constructing the Built Environment (Design and Planning) (720)**

#### 1
State two defects associated with structural movement of a building.

<table>
<thead>
<tr>
<th>Acceptable answer(s)</th>
<th>Guidance</th>
<th>Max marks</th>
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</thead>
<tbody>
<tr>
<td>Any two from the list below at one mark each.</td>
<td>n/a</td>
<td>2</td>
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<tr>
<td>- Cracking of walls (eg brickwork/plaster) max one mark.</td>
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<tr>
<td>- Bowing of walls.</td>
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<tr>
<td>- Floors out of alignment.</td>
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<tr>
<td>- Door frames twisted.</td>
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<tr>
<td>- Movement along the bed joints and features eg cills.</td>
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#### 2
Describe why it is important to have a planned maintenance programme.

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<tr>
<td>The main reasons why include; it keeps the property in optimum condition (1), allows work items to be scheduled (1) and costs spread out (1), it reduces running (1) and maintenance (1) costs over the life span of the building. Increases the lifespan of the building (1).</td>
<td>The answer needs to be a description and a list will be limited to one mark max.</td>
<td>3</td>
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#### 3
Outline the three main stages when tendering for a conversion project.

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<tbody>
<tr>
<td>- The contract documents are sent to the contractors (1).</td>
<td>n/a</td>
<td>3</td>
</tr>
<tr>
<td>- Contractors price the works (1).</td>
<td></td>
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<tr>
<td>- The contractor is appointed and contracts signed (1).</td>
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</table>
Summarise the requirements of the Party Wall etc. Act for a conversion project which requires structural alterations on and adjacent to the party wall.

Acceptable answer(s) | Guidance | Max marks
---|---|---
A coherent summary that describes the requirements and does not list them. Responses must relate specifically to the scenario given. The discussion will include some or all the following for one mark each to a maximum of five marks.

Any work on or adjacent to a Party wall, structure or boundary (fence) may be subject to the requirements of the Party Wall etc Act (1). If the works materially alter the wall then a Party Wall Award is required (1). This is prepared by surveyors acting for the person the work is being undertaken for (Building Owner) (1) and the neighbour(s) (Adjoining Owner) (1). The award will stipulate the specific requirements of the Act and will serve to protect the structural stability of the wall/structure/boundary (1). A detailed record (Schedule of Condition) will be prepare (1) and along with the proposed work details will be appended to the award (1). The surveyors acting for the BO and AO will agree both the condition, and the works relative to the wall (1). The principal aim is to ensure that the new works do not impact on the wall in any way (1). During the works the BO and AO surveyors will monitor the works in relation to the wall (1) and both will inspect and sign off on completion (1).

If candidates simply list the process then a max of two marks will be awarded for a comprehensive list.

Explain why certain building services tasks within the construction phase of a conversion project must be undertaken by a suitably qualified person.

Acceptable answer(s) | Guidance | Max marks
---|---|---
A coherent explanation that highlights that:
All works to Gas and Electrical (1) installations must be carried out by a trained, certified and competent individual.

Both gas and electrical installation are highly dangerous and failure to install correctly can lead to personal injury and damage to the property (1). Both trades are carefully regulated and certificates of completion are required at the end of a project (1). Building control will request copies of all certificates before they sign off on a project (1).

Gas and Electric alone would get one mark. There needs to be a discussion as to why it is important and consideration of the need for certification by a qualified and competent person.
6. Explain the implications of poor workmanship on the long-term condition of a building.

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| A coherent linked description that highlights the main issues caused by poor workmanship. These include **one mark each as part of a linked explanation**:  
  - Faster wear and tear of the fabric.  
  - Increased maintenance cost.  
  - Exacerbated failure of service components.  
  - Reduced efficiency in the running costs.  
  - Shorter life span for components.  
  - Potential non-compliance with legislation.  
  - Increased potential of obsolescence. | If candidates simply produce a list the maximum awarded will be **one mark**. | 2 |

7. State **two** types of work a residential building surveyor may survey for legal purposes.

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</table>
| Any **two** for **one** mark each from:  
  - Party wall.  
  - Boundary dispute.  
  - House disposal (sale) / acquisition (purchase) (one mark max).  
  - Right to light.  
  - Expert witness. | n/a | 2 |

8a) State what is meant by the acronym ‘RICS’?

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<tr>
<td>Royal Institution of Chartered Surveyors.</td>
<td>n/a</td>
<td>1</td>
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8(b) State what is the role of the RICS?

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<td>The professional/governing body for surveyors who set and manage professional standards.</td>
<td>n/a</td>
<td>1</td>
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</table>
9. Explain the role of a building surveyor in a refurbishment project for an office building.

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| A coherent linked explanation that highlights how the building surveyor could be involved in the following way:  
  - Inception - design ideas (1), budget planning (1).  
  - Design – survey of building (1), production of drawings (1), production of specification (1).  
  - Legal – dealing with H&S (1), planning and building control (1).  
  - Contract administration – acting as contract administrator (1).  
  - Project management of the works (1). | The candidate must produce a coherent and linked discussion explain each of the above aspects of their involvement. A simple list will gain a maximum of three marks. | 5 |

10. State two different ways in which a surveyor can reduce the health and safety risk when working at height.

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| Any two, max one mark each from:  
  - Wear appropriate PPE.  
  - Do not work off ladders.  
  - Use alternative methods of surveying eg drones and pole cameras.  
  - Use mansafe systems where provided.  
  - Do not work alone.  
  - Undertake dynamic risk assessments. | The answers must be two different considerations. For example, wear a harness and wear a hard hat are both in the category of PPE so would achieve one mark. | 2 |

11. State two sources of evidence a surveyor would obtain from a site visit for an insurance reinstatement survey.

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| Any two for one mark each from:  
  - Size of the building.  
  - Methods of construction.  
  - Details of the surrounding area.  
  - Information relating to the neighbouring properties.  
  - Site wide restrictions or issues.  
  - Photographs | n/a | 2 |
12. Explain the safety measures a building surveyor should undertake off site, prior to commencing a site inspection for a survey.

**Acceptable answer(s)**

A coherent linked explanation that considers the pre-survey protocol. This will include:

**Guidance**

Max marks

Measures: max three marks. Speaking to the client to (1), check the planning portal to obtain details of any previous works (1), find out the age of the property (1), ascertain where possible the methods of construction (1), obtain any existing asbestos surveys (1), review any historic survey reports (1), view the property via in-line mapping systems (1), speak to neighbours (1) speak to contractors who may have worked on the building historically (1).

Why: max two marks:
Ascertained any known hazards, right equipment, avoid asbestos, identify if colleague is required.

13. Name two historical events that prompted significant development and change to Building Regulations.

**Acceptable answer(s)**

Any two for one mark each from the list below.

- Great Fire of London.
- Plague.
- Cholera outbreaks.
- Industrial Revolution.
- World War II.
- Ronan Point explosion.
- Climate change.

**Guidance**

Max marks

n/a

2

14. State three categories listed in the current Building Act that the Building Regulations are designed to satisfy.

**Acceptable answer(s)**

Any three for one mark each from the list below.

- Health and safety of persons in and around building.
- Conservation of fuel and power.
- Preventing waste, undue consumption, misuse or contamination of water.

**Guidance**

Max marks

n/a

3
- Protection or enhancement of the environment.
- Sustainable development.
- Prevention or detection of crime.

15. Explain why Approved Document L will have increasing importance in the future.

<table>
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<tr>
<td>A coherent explanation that considers the reasons why.</td>
<td>n/a</td>
<td>4</td>
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Max two marks for aspects of Part L:
Approved Document L is the Conservation of Fuel and Power (1). It stipulates the minimum requirements for achieving compliance with the Build Regulations (1) and considers issues such as insulations (1) modern methods of construction (1) energy producing appliances (1) alternative energy sources (1).

Max two marks for why:
The UK Government have stated that through control of the Building Regulations and the reduction of energy consumption in the construction (1) and use of all buildings the country will be able to meet their commitment to climate change (1). Primarily concerned with the reduction in energy consumption for all new and refurbished buildings. (1). Approved Document L is a key part in the UK strategy for dealing with climate change (1).

16. Describe how a developer should satisfy the minimum requirements for sanitary conveniences and washing facilities to ensure Building Regulations compliance.

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<td>A coherent linked discussion that details the requirements of the App Docs to meet the minimum requirements.</td>
<td>n/a</td>
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Requirements (max two marks):
Sanitary Conveniences and washing facilities are covered in App Doc G (1). They stipulate, adequate and suitable sanitary conveniences must be provided in rooms provided to accommodate them or in bathrooms (1). Adequate hand washing facilities must be provided in rooms containing sanitary conveniences; (1) or rooms or spaces adjacent to rooms containing sanitary

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conveniences (1). Any room containing a sanitary convenience, a bidet, or any facility for washing hands provided in accordance with paragraph, must be separated from any kitchen or any area where food is prepared (1).

Why: max one mark:
Ensure hygiene, ensure consistent supply of services, prevent smells, prevents the spread of disease.

17 Your client has purchased a large double fronted Georgian town house (circa 1900) in a central location of a busy town. The property is traditionally constructed with solid brick walls, slate covered timber trussed roof and single glazed box sash windows.

The property was last used as offices and is in a poor state of repair. Several of the original doors have been removed, the roof has slipped with missing slates and the windows have extensive wet rot. There is no thermal insulation and there are damp issues in the rear ground floor offices. The services are old but functional, however the cold-water provision is through lead pipes.

Your client wants to convert the property back to a single dwelling which they intend to live in. The property is not listed, but is located in a conservation area. You have been asked to advise on:
• The role of a building surveyor in the refurbishment project.
• Measures needed to comply with the Building Regulations.
• Maintenance considerations once the property is refurbished.

Discuss the main considerations in respect of the client’s specific request.

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<td><strong>Intention:</strong> The aim of this question is for candidates to demonstrate their knowledge of and understanding of the role of the building surveyor in a refurbishment project. To show they understand the maintenance requirements for a property and how to apply legislative requirements to a conversion project to satisfy Building Regulations.</td>
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</table>
| Band 1 (1-4 marks) The learner identifies a limited number of the key considerations, with limited discussion to support them. There is limited reference to the role of the building surveyor in a refurbishment project and limited consideration of the maintenance and requirements and application of the building regulations. The response lacks accuracy and detail and makes a limited reference to the scenario. To access higher marks, the response must be clearly linked to the scenario. | Indicative content: Role of the building surveyor:
• Building survey, specifications, drawings, inspections. Project management, certification, contractual matters, payments, quality control. |
| Measures needed to comply with the Building Regulations:
• Legislative needs, construction methods, building regulation compliance, approved documents and application process. |
| Maintenance considerations once the property is refurbished:
• Construction methods, maintenance requirements, | 12 |
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<tr>
<th><strong>Band 2 (5-8 marks)</strong></th>
<th>maintenance options, schedules of maintenance and maintenance regimes.</th>
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<tbody>
<tr>
<td>The learner identifies a range of the key considerations, with a broad discussion to support them. The responses are detailed and make some reference to the scenario. To access higher marks, the response must have the tasks listed in a logical order.</td>
<td><em>For no awardable content, award 0 marks.</em></td>
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<tr>
<td><strong>Band 3 (9-12 marks)</strong></td>
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<tr>
<td>The learner identifies a comprehensive range of the key considerations with a detailed discussion to support them. The responses are detailed and makes clear links to the scenario. The learner demonstrates a thorough understanding of the main considerations and presents them in a linked and coherent manner. To access higher marks, the response must include reference to specific legislative requirements and contractual procedures.</td>
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