



6720-552 JUNE 2018

Level 3 Advanced Technical Extended Diploma in Constructing the Built Environment (Construction) (1080)

Level 3 Constructing the Built Environment – Theory exam

If provided, stick your candidate barcode label here.

Friday 22 June 2018
09:30 – 12:30

Candidate name (first, last)

First

Last

Candidate enrolment number

Date of birth (DDMMYYYY)

Gender (M/F)

Assessment date (DDMMYYYY)

Centre number

Candidate signature and declaration*

• If any additional answer sheets are used, enter the additional number of pages in this box.

• Please ensure that you **staple** additional answer sheets to the **back** of this answer booklet, clearly labelling them with your full name, enrolment number, centre number and qualification number in BLOCK CAPITALS.

• All candidates need to use a **black/blue pen**. **Do not** use a pencil or gel pen.

• If provided with source documents, these documents **will not** be returned to City & Guilds, and will be shredded. **Do not** write on the source documents.

***I declare that I had no prior knowledge of the questions in this assessment and that I will not divulge to any person any information about the questions.**

You should have the following for this examination

- a pen with blue or black ink

General instructions

This question paper is the property of City and Guilds of London and should be returned after the examination.

- This examination contains **25** questions. Answer **all** questions.
 - Answer the questions in the space provided.
 - The marks for **each** question are shown in brackets.
- Show **all** calculations.



1 Name **two** components of a gas supply system that should be installed in a box fixed to the external wall of a building. (2 marks)

2 a) Differentiate between surface water and foul water? (2 marks)

b) Describe what happens to surface water when removed from a plot of land? (2 marks)

3 Name the point at which the responsibility for a cold water supply changes from the water authority to the consumer. (2 marks)

4 Explain why an indirect hot water system requires two storage cisterns when a direct system only needs one. (4 marks)

5 Explain how rain water can be captured and used in domestic properties. (3 marks)

6 Explain why metal-faced switches **should not** be used when extending an existing radial lighting system that is wired using only two-core cable. (3 marks)

7 State **two** defects associated with structural movement of a building. (2 marks)

8 Describe why it is important to have a planned maintenance programme. (3 marks)

- 9 Outline the **three** main stages when tendering for a conversion project. (3 marks)

- 10 Summarise the requirements of the Party Wall etc Act for a conversion project which requires structural alterations on and adjacent to the party wall. (5 marks)

- 11 Explain why certain building services tasks within the construction phase of a conversion project **must** be undertaken by a suitably qualified person. (3 marks)

12 Explain the implications of poor workmanship on the long-term condition of a building. (2 marks)

13 State **two** types of work a residential building surveyor may survey for legal purposes. (2 marks)

14 a) State what is meant by the acronym 'RICS'? (1 mark)

b) State what is the role of the RICS? (1 mark)

15 Explain the role of a building surveyor in a refurbishment project for an office building. (5 marks)

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

(2 marks)

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

(2 marks)

18 Explain the safety measures a building surveyor should undertake off site, prior to commencing a site inspection for a survey.

(5 marks)

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

(2 marks)

20 State **three** categories listed in the current Building Act that the Building Regulations are designed to satisfy. (3 marks)

21 Outline how Approved Document E applies to a residential flat refurbishment. (3 marks)

22 Explain why Approved Document L will have increasing importance in the future. (4 marks)

23 Describe how a developer should satisfy the **minimum** requirements for sanitary conveniences and washing facilities to ensure Building Regulations compliance. (3 marks)

24 Explain the impact the Public Health Act has on the construction and built environment sector. (3 marks)

25 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.
- Installation of new plumbing and drainage services.
- Maintenance considerations once the property is refurbished.

a) Explain why there is a need to refurbish older buildings. (3 marks)

b) Discuss the **main** considerations in respect of the client's specific request. (15 marks)
