6720-502 MARCH 2018
Level 2 Technical Award in Constructing and Maintaining the Built Environment
Level 2 Constructing and Maintaining the Built Environment – Theory exam

If provided, stick your candidate barcode label here.

Friday 23 March 2018
09:30 – 11:30

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 14 questions. Answer all questions.
  ◦ Answer the questions in the space provided.
  ◦ The marks for each question are shown in brackets.
1  a) State which area of construction work includes the design and installation of heating and ventilating systems.  

b) Identify two stages in the building cycle.

2  Describe how precedence diagrams are used in construction projects.

3  a) Identify two types of load bearing internal partition walls used in low-rise domestic buildings.

b) Identify one form of non-load bearing internal partition wall used in low-rise domestic buildings.
4. Identify the foundation types labelled a), b) and c) in Figure 1. (3 marks)

a) 

b) 

c) 

Figure 1

5. Figure 2 shows a suspended timber ground floor. Name the components labelled A, B, C and D. (4 marks)

A

B

C

D
6 Compare wet and dry finishes to walls. (4 marks)

7 Explain why steel is used in the construction and built environment. (4 marks)

8 a) State two reasons why buildings may require maintenance over time. (2 marks)

8 b) Identify two methods of providing a damp proof course to an existing building. (2 marks)
9  a) Name two building services that must be inspected and reported on when carrying out a condition survey.  

b) Name two elements of a roof that will be inspected and reported on when completing a maintenance report.  

10 Explain why preventive maintenance methods are used in a sports club.
11 a) Name two jobs undertaken by a plumber. (2 marks)

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b) Name two jobs undertaken by an electrician. (2 marks)

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12 a) Identify the items of Personal Protective Equipment (PPE) labelled i) and ii) in Figure 3. (2 marks)

i)                                                                                                     ii)

Figure 3

i)                                                                                                     ii)

b) Name the trade area the following tools or equipment are used. (2 marks)

i) Hawk.

________________________________________________________________________

ii) Steam stripper.

________________________________________________________________________
13 Explain why risk assessments are used within a construction project. (5 marks)
A builder has purchased a 19th century terraced house that has been unoccupied for ten years. The house has solid brick walls, single-glazed timber windows and a timber truss roof covered in slates. A condition survey has identified rising damp in the walls, wet rot in both the roof truss and the windows, slippage and failure of the slates in the roof. A new roof is required and the walls and windows will need replacing or repairing. You have been asked to manage the work that needs to be completed. The work will include the specification of a new roof, the renewal of the existing roof and the sourcing of the craft operatives, tools, equipment, materials and PPE needed to complete the project.

**Figure 4**

Referring to Figure 4 and the scenario above. Discuss the construction work to be done to make the property habitable. (9 marks)