



7906-501 MARCH 2018

Level 3 Advanced Technical Diploma in Site Carpentry (450)

Level 3 Site Carpentry – Theory exam

If provided, stick your candidate barcode label here.

Thursday 22 March 2018
09:30 – 12:00

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

- non-programmable calculator
- a pen with blue or black ink

General instructions

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

- This examination contains **21** questions. Answer **all** questions.
- **Section A** – consists of **10** multiple choice questions, each carrying 1 mark.
 - Indicate your response (a, b, c or d) in the space provided.
- **Section B** – consists of **11** structured/short answer questions.
 - Answer the questions in the space provided.
 - The marks for each question are shown in brackets.



Section A

1 What design features of a domestic house would building control be concerned with?

- a) Pitch of roof.
- b) Colour of doors.
- c) Handrail height.
- d) Number of bedrooms.

Response: _____

2 What material has the **best** thermal properties?

- a) Fibreglass.
- b) Aerated blocks.
- c) Polyisocyanurate.
- d) Expanded polystyrene.

Response: _____

3 When tendering for a contract, what would be submitted if all the variables are unknown?

- a) Fixed.
- b) Variation.
- c) Estimate.
- d) Quote.

Response: _____

4 Using the following data, calculate the cost of plywood required to deck out an 8 m x 3 m flat roof.

Data

2.4 m x 1.2 m plywood sheets
£27.50 per sheet
VAT @ 20%
No allowance made for waste or joist centres.

- a) £247.50
- b) £297
- c) £363
- d) £396.50

Response: _____

5 Which site document would include a section titled AOB?

- a) Time sheet.
- b) Specification.
- c) Meeting agenda.
- d) Method statement.

Response: _____



6 Which angle is used in isometric projection to represent a horizontal line?

- a) 30°
- b) 45°
- c) 60°
- d) 90°

Response: _____

7 What effect could woodworm infestation have on timber?

- a) Makes it much heavier.
- b) Increases the risk of fungal attack.
- c) Makes it less absorbent.
- d) Prevents further beetle attack.

Response: _____

8 In what situation may a repair to a box frame window be required rather than replaced?

- a) When constructed of hardwood.
- b) When positioned in a listed building.
- c) When on the first floor of a building.
- d) When constructed of PVCu sections.

Response: _____

9 In which document would information on maintenance schedules for woodworking machinery be found?

- a) Manufacturers literature.
- b) Risk assessments.
- c) Approved code of practice.
- d) Method statements.

Response: _____

10 How is a standard Allen key used to obtain **most** torque without damaging the bolt?

- a) Use a battery drill in high gear and low clutch setting.
- b) Insert the long end into the bolt and push the short end.
- c) Use a battery drill in low gear and high clutch setting.
- d) Insert the short end into the bolt and push the long end.

Response: _____



Section B

11 A client has approached you for advice on reducing the environmental impact of a small chalet type building in the field behind the house.
State **three** design features that could be incorporated that would reduce the amount of energy used by the building.

(3 marks)

Questions 12, 13 and 14 are related to the below scenario

A Georgian house in the middle of an old town requires considerable refurbishment and updating. The exterior woodwork is in particular need of attention.

12 Explain why additional restrictions are likely to be placed on any work being carried out to this building.

(4 marks)

13 Give **four** examples of alterations that may be required when the loft is to be converted into a habitable space.

(4 marks)

14 a) Explain why this project would require specialist considerations when producing the programme of work.

(6 marks)

b) Describe suitable planning methods that could be used to carry out the refurbishment to the Georgian house.

(4 marks)

- 15 It has been discovered during the renovation of an old cottage that the ends of some first floor joists have rotted away.
Compare **two** methods of remedying the damage in relation to cost, time and strength. (6 marks)

- 16 A portable table saw has been delivered on site and you are required to set and use the machine.
State **four** safety checks or requirements that should be carried out. (4 marks)

- 17 Describe the purpose of limited projection tooling on a standard spindle moulder profiling block. (4 marks)

Questions 18 and 19 is related to the following scenario

You are required to produce the following sawn sections 6 lengths at 1.100 m x 100 mm excluding kerf x 75 mm and 1 length at 1.300 m x 150 mm x 75 mm using traditional cross cut and rip saws. This is to be cut from 1 length of stock timber 4.800 m x 200 mm x 75 mm.

18 State in what order the timber would be machined and why the timber is machined in this order. (4 marks)

19 The blades on the cross cut and circular rip saw require changing. Explain what needs to be considered when changing the blades. (7 marks)

20 State **two** purposes of a false fence on a spindle moulder machine. (2 marks)
