



7906-501 MARCH 2022

Level 3 Advanced Technical Diploma in Site Carpentry (450)

Level 3 Site Carpentry – Theory exam (1)

If provided, stick your candidate barcode label here.

Monday 21 March 2022
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 additional answer sheets are used, enter the additional number of pages in this box. 
- Before taking the examination, **all candidates** must check that their barcode label is in the appropriate box. Incorrectly placed barcodes may cause delays in the marking process.
- Please ensure that you staple additional answer sheets to the **back** of this answer booklet, clearly labelling these 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, unless otherwise instructed.
- 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 examination 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
- a non-programmable calculator

General instructions

- This examination contains **23** questions. Answer **all** questions.
- **Section A** – consist of **10** multiple-choice questions, each carrying 1 mark.
 - Indicate your response (a, b, c and d) in the space provided.
- **Section B** – consist of **13** structured/short answer questions.
 - Answer the questions in the space provided.
 - The maximum marks for **each** question are shown in brackets.
- Cross through any work you do not want to be marked.



Section A

- 1 What is the purpose of the Building Regulations?
- a) To ensure that the construction workforce is safe during the building stage.
 - b) They are designed to further the conservation of fuel and power.
 - c) They are used to complete an energy performance certificate.
 - d) To provide fire protection for the building contractors.

Response: _____

- 2 Where are glass wool batts **most** commonly used?
- a) In cavity walls.
 - b) In solid walls.
 - c) In timber floors.
 - d) In concrete floors.

Response: _____

- 3 Where a contract is advertised inviting qualifying bidders to submit a price 'for work', what name is given to this type of tender?
- a) Open.
 - b) Closed.
 - c) Restricted.
 - d) Nominated.

Response: _____

- 4 In relation to managing workflow, what does the abbreviation CPA mean?
- a) Construction Products Association.
 - b) Computer Plotting Algorithms.
 - c) Controlled Planning Authority.
 - d) Critical Path Analysis.

Response: _____

- 5 Under what circumstances is a permit-to-work required?
- a) When constructing stud partitions.
 - b) When working in a confined space.
 - c) When managing site transportation.
 - d) When erecting a mobile tower scaffold.

Response: _____

6 What is a benefit of using CAD over traditional hand produced drawings?

- a) No specialist training required.
- b) Cheap set up and running costs.
- c) Amendments can be easily made.
- d) No specialist software is required.

Response: _____

7 What would be the risk to timber ground floors if the airbricks were blocked?

- a) Insect infestation.
- b) Weathering.
- c) Wet rot.
- d) Dry rot.

Response: _____

8 What joint would be used when replacing a section of door jamb that has rotted at the foot?

- a) Butt.
- b) Splice.
- c) Splint.
- d) Bridle.

Response: _____

9 What document **must** be consulted before using a narrow bandsaw for the first time?

- a) Health and safety policy.
- b) Maintenance schedule.
- c) Risk assessment.
- d) Specification.

Response: _____

10 When setting up a mortice machine, what is adjusted when cutting haunches?

- a) Depth stop.
- b) Outfeed table.
- c) Auger clearance.
- d) Hollow chisel bush.

Response: _____

Section B

11 List **three** sources of renewable energy. (3 marks)

12 State **four** pieces of information that can be found on a Gantt chart. (4 marks)

13 Give **two** examples of how to improve the environmental impact of an existing building that has been constructed using solid external walls. (4 marks)

14 An operative has been asked to calculate the linear metres required to lay traditional floor boarding with a 115 mm face coverage. The floor measuring is 4.2 m x 3.4 m. How many linear metres are required to cover the floor allowing an additional 5% for waste? Show **all** your working out. (4 marks)

15 Describe how the following information sources are used when preparing a quote. (2 marks)
a) Bill of Quantities.

b) Door schedule. (2 marks)

c) Drawings. (2 marks)

16 Name **two** factors that can cause deterioration to an externally positioned timber door frame. (2 marks)

17 Explain the benefits of planned maintenance for a building. (4 marks)

18 In relation to woodworking machinery, state the relevant documentation that should be consulted to provide guidance on safe working practices, for **each** of the following.
a) Dust. (1 mark)

b) Guard setting. (1 mark)

c) Machine maintenance. (1 mark)

d) Chip limited tooling. (1 mark)

19 State the sequence of operations required to change the saw blade on a rip saw. (6 marks)

20 Explain the importance of training woodworking machining operatives. (4 marks)

21 a) Why should a push stick be a **minimum** of 450 mm in overall length? (2 marks)

b) Why should a push stick have a birds mouth notch at its leading edge? (2 marks)

22 Describe how poor housekeeping directly affects the use of a thicknesser. (3 marks)



23 Following a defects survey, a landlord has contacted your employer to carry out repairs to a large Victorian town house which has been converted into four self-contained flats.
The report shows that the suspended timber ground floor has severe woodworm and the roof structure is damaged due to water ingress causing wet rot. Your employer has asked you to plan and carry out the work to remedy the damage.

Discuss the planning and remedial actions required to complete the work. (12 marks)



