



7905-501 MARCH 2022

Level 3 Advanced Technical Diploma in Bricklaying

Level 3 Bricklaying – Theory exam (1)

If provided, stick your candidate barcode label here.

Tuesday 15 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 **25** questions. Answer **all** questions.
- **Section A** – consists of **10** multiple-choice questions, each carrying 1 mark.
 - Indicate your response (a, b, c and d) in the space provided.
- **Section B** – consists of **15** 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 Who is responsible for checking the stability of an excavation prior to laying the concrete foundation?
- a) Land Surveyor.
 - b) The Estimator.
 - c) Building Control Officer.
 - d) The Principle Architect.

Response: _____

- 2 Which insulation material is the **most** environmentally friendly?
- a) PIR.
 - b) Glass fibre.
 - c) Sheeps wool.
 - d) Mineral based.

Response: _____

- 3 What type of wall construction material provides the **most** effective insulation?
- a) Hollow block.
 - b) Engineering brick.
 - c) Solid facing brick.
 - d) Lightweight block.

Response: _____

- 4 How much concrete in m^3 would be required to lay a concrete path 7.500 m long, 0.900 m wide and 0.100 m thick?
- a) 0.675 m^3
 - b) 6.750 m^3
 - c) 67.500 m^3
 - d) 675.000 m^3

Response: _____

- 5 Which is a suitable mortar gauge for laying facing bricks?

	Cement	Lime	Sand
a)	1	2	4
b)	2	3	6
c)	1	1	6
d)	2	2	4

Response: _____

6 Which common defect could cause weakness in a cavity wall?

- a) Corroded wall ties.
- b) Sulphate attack.
- c) Lime leaching.
- d) Dry rot.

Response: _____

7 Which component is used to assist in the removal of the arch former when providing temporary support to construct an arch?

- a) Laths.
- b) Needles.
- c) Sole plates.
- d) Folding wedges.

Response: _____

8 Which section of the Building Regulations provides information on fireplaces?

- a) Approved document A.
- b) Approved document B.
- c) Approved document H.
- d) Approved document J.

Response: _____

9 Which component can be fitted to a chimney to assist in the discharge of fumes?

- a) Flue liner.
- b) Cowl.
- c) Pot.
- d) Fire back.

Response: _____

10 What size should a throat be made in a solid fuel appliance?

- a) 250 mm
- b) 200 mm
- c) 150 mm
- d) 100 mm

Response: _____

Section B

11 State **two** construction components that can stop dampness from rising through a building's walls and floors. (2 marks)

12 State **two** building materials that are considered to be sustainable in construction. (2 marks)

13 State the difference between an open and closed tender. (2 marks)

14 State **four** sources of information that would be included on a bar chart (Gantt chart) when used to plan a construction project. (4 marks)

17 Explain the purpose of a penalty clause in a construction contract. (4 marks)

18 Explain the benefits of manual drafting when producing construction drawings. (4 marks)

19 State **two** uses of engineering bricks in wall construction. (2 marks)

23 Why is vermiculite used in fireplace construction?

(2 marks)

24 Describe the purpose of corbelling at the top of a chimney stack.

(4 marks)
