7905-501 JUNE 2018
Level 3 Advanced Technical Diploma in Bricklaying (450)
Level 3 Bricklaying – Theory exam

If provided, stick your candidate barcode label here.

Tuesday 19 June 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 scientific calculator
• 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 22 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 12 structured/short answer questions.
  ° Answer the questions in the space provided.
  ° The marks for each question are shown in brackets.
Section A

1. Which regulation covers accident reporting in the workplace?
   a) RIDDOR.
   b) LOLER.
   c) PUWER.
   d) EAWR.

   Response: ________________________

2. Which part of the construction process is inspected by a Building Control Officer?
   a) Roof slating or tiling.
   b) Boundary walls.
   c) Foundation concrete.
   d) Painting and decorating.

   Response: ________________________

3. Which processes form part of a Building Information Modelling (BIM) system?
   a) Building control and CAD.
   b) CAD and communication.
   c) Building simulation and data management.
   d) Building simulation and security management.

   Response: ________________________

4. What is an advantage of using CAD compared to traditional drawing?
   a) More cost effective.
   b) Minimum training required.
   c) Easy for site operative to use.
   d) Alterations are easy to make.

   Response: ________________________

5. What materials are most suitable to use as a rigid DPC?
   a) Concrete bricks.
   b) Handmade bricks.
   c) Engineering bricks.
   d) Calcium silicate bricks.

   Response: ________________________
6 Which common defect arises from chimney flues not being lined?
   a) Flue blockage.
   b) Calcium attack.
   c) Brick erosion.
   d) Pot erosion.

Response: ________________________

7 Which is the most suitable item of equipment to use for support, when replacing a lintel?
   a) Strongboys.
   b) Timber props.
   c) Raking shores.
   d) Flying shores.

Response: ________________________

8 Which part of the approved document from the Building Regulations covers the construction of fireplaces and flues?
   a) A.
   b) C.
   c) F.
   d) J.

Response: ________________________

9 What is the minimum thickness for a structural hearth?
   a) 75 mm
   b) 100 mm
   c) 125 mm
   d) 150 mm

Response: ________________________

10 What is the purpose of using vermiculite fill behind the fire back, when fixing a fire surround?
    a) To fill the hollow area.
    b) To provide insulation.
    c) To allow for expansion.
    d) To save using brick pieces.

Response: ________________________
Section B

11 When extracting information to set out parts of a building. State the drawings that would be used to determine each of the following. (4 marks)
   a) Window height.

   b) Storey height.

   c) Room size.

   d) Frontage line.

12 Describe the information that can be found on a Gantt chart that supports the efficient progression of a construction project. (6 marks)
13 Explain the importance of a Building Control Officer inspecting the excavation for a foundation prior to concrete being poured. 

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14 Describe how energy saving measures can be incorporated into a building to save energy. 

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15 Describe **two** advantages and **two** disadvantages of using email as a method of communication. (4 marks)

16 Summarise **four** considerations when preparing a risk assessment for working below ground level. (4 marks)

17 Describe **two** defects that can occur if poor quality bricks are used for a brick on edge. (4 marks)
18. Describe the consequences of incorrectly fitting a blade to a disc cutter. (6 marks)

19. Name four items used in a chimney to prevent water from penetrating the building. (4 marks)

20. Describe three design features that can be incorporated into a chimney to assist the dispersal of water from the stack. (3 marks)
21 a) Give two reasons why the finished height contributes to the function of the chimney. (2 marks)

b) Why is it important to seal the chimney on a pitched roof. (1 mark)

22 A client requires some advice and guidance on the planning and design of a boundary wall around a garden. The client hasn't provided much detail of what is required and needs some guidance.

Discuss the information, advice and guidance that would be provided to the client. (12 marks)
Question 22 continued