7906-503 JUNE 2018
Level 3 Advanced Technical Diploma in Architectural Joinery (450)
Level 3 Architectural Joinery – Theory exam

If provided, stick your candidate barcode label here.

Thursday 21 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 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 24 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 14 structured/short answer questions.
  ° Answer the questions in the space provided.
  ° The marks for each question are shown in brackets.
Section A

1. An employee is off work due to an accident. After how many consecutive days of absence does the incident become reportable under RIDDOR?
   a) 3.
   b) 5.
   c) 7.
   d) 9.

   Response: ________________________

2. Calculate the area of MDF required for 12 risers 900 mm long and 200 mm wide.
   a) 1.32 m$^2$
   b) 2.16 m$^2$
   c) 13.2 m$^2$
   d) 21.6 m$^2$

   Response: ________________________

3. What document shows the scheduling of work activities?
   a) Time sheets.
   b) Gantt chart.
   c) Specification.
   d) Day work sheets.

   Response: ________________________

4. Which **best** describes BIM?
   a) An integrated approach to building design.
   b) The process of regulating standards of building.
   c) The process of applying for planning permission.
   d) A scaled model of the finished construction project.

   Response: ________________________

5. What is the **maximum** distance allowed for the riving knife to be behind the saw teeth at table level, on a circular saw?
   a) 5 mm.
   b) 8 mm.
   c) 12 mm.
   d) 15 mm.

   Response: ________________________
6. When thicknessing timber, which part of the machine limits the amount that can be planed off in one pass?
   a) Cutter block.
   b) Pressure bar.
   c) Friction rollers.
   d) Cutter projection.

Response: __________________________

7. How far behind the bandsaw blade, should the thrust wheel be set?
   a) 1 mm.
   b) 3 mm.
   c) 5 mm.
   d) 7 mm.

Response: __________________________

8. What is the **main** risk associated when ripping case hardened timber?
   a) Dust.
   b) Kickback.
   c) Increased noise.
   d) Operator fatigue.

Response: __________________________

9. Within how many seconds **must** a circular saw blade come to a halt when switched off?
   a) 5.
   b) 10.
   c) 15.
   d) 20.

Response: __________________________

10. How far behind the centre of a circular rip saw blade **must** the timber be supported, when being cut?
    a) 1000 mm.
    b) 1100 mm.
    c) 1200 mm.
    d) 1300 mm.

Response: __________________________
Section B

11 Describe **three** different methods of reducing energy use, when designing and constructing new buildings. (3 marks)

12 Describe **one** method used to plan work activities in construction. (3 marks)

13 State **three** types of projection used in graphical communication. (3 marks)
14 Explain how joinery work is costed. (6 marks)

15 Explain why CAD is considered to be the preferred method of producing drawings. (6 marks)

16 State two legislative documents, other than PUWER, that relates to the safe use of woodworking machinery. (2 marks)
17 State two maintenance requirements that can be obtained from the manufacturer's instructions for a table saw. 

18 State four operations that can be carried out on a rip sawing machine. 

19 a) State on which machine split feed rollers are found? 

b) Explain the function of the split feed rollers. 

20 State a suitable mortice chisel size for a 
   a) 34 mm sash stock 
   b) 45 mm panelled door.
21 Describe two requirements of PUWER in relation to Regulation 9 (Training). (4 marks)

22 Explain how the riving knife is set up after a circular saw blade has been changed, to prevent binding on the saw blade. (3 marks)

23 Explain the factors to consider prior to changing a saw blade. (5 marks)
An architect has decided to incorporate an elliptical window into the design of a new build development of 50 houses as shown in Figure 1. Discuss the planning and machine considerations required to construct the frames for the production run.
Question 24 continued

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