7906-501 JUNE 2018
Level 3 Advanced Technical Diploma in Site Carpentry (450)
Level 3 Site Carpentry – Theory exam

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 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 Which **best** describes ‘permitted development’?

   a) Construction work that does not require building regulations approval.
   b) Certain types of building work that do not require planning permission.
   c) Construction work that can be completed with the owner's permission.
   d) Certain types of building work that requires outline planning approval.

   Response: ________________________

2 What is the purpose of sustainable development?

   a) To provide high quality developments.
   b) To provide low building cost developments.
   c) To provide developments constructed using only man made materials.
   d) To provide developments constructed without depleting natural resources.

   Response: ________________________

3 Where is multi-foil insulation **most** commonly used?

   a) In solid floors.
   b) In cavity walls.
   c) In pitched roofs.
   d) In partition walls.

   Response: ________________________

4 Rain water can be harvested for flushing toilets. What is this water commonly known as?

   a) Green water.
   b) Blue water.
   c) White water.
   d) Grey water.

   Response: ________________________

5 What is the purpose of a documented risk assessments and method statements?

   a) To complete a task quickly and economically.
   b) To identify materials to be used and state how to eliminate risks.
   c) To identify potential harm and give a safe sequence of operations.
   d) To complete a task to a high quality and meets the customer needs.

   Response: ________________________
6 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: ____________________

7 What is the **minimum** moisture content that will cause wet rot to start?
   a) 10%
   b) 15%
   c) 20%
   d) 25%

   Response: ____________________

8 What joint would be used when replacing the foot of a rafter that is showing signs of decay?
   a) Butt.
   b) Scarf.
   c) Header.
   d) Housing.

   Response: ____________________

9 What will be effected by fitting a blade less than the recommended diameter to a table saw?
   a) The peripheral speed will increase.
   b) The peripheral speed will reduce.
   c) The RPM will increase.
   d) The RPM will reduce.

   Response: ____________________

10 What should be used, when cutting glue blocks on a table saw?
   a) Saddle.
   b) Template.
   c) False fence.
   d) Wedge jig.

   Response: ____________________
Section B

11  a) List three types of planning permission.  

__________________________________________  

__________________________________________  

__________________________________________  

b) Summarise two of the planning permission listed in 11 a).  

__________________________________________  

__________________________________________  

__________________________________________  

12  Describe the information sources that would be consulted to accurately submit a tender.  

__________________________________________  

__________________________________________  

__________________________________________  

__________________________________________  

__________________________________________  

__________________________________________  

__________________________________________
13 A carpenter is working on a building site and there has been a near miss incident. As a precaution it has been decided to communicate safety information to all staff. Describe **two** methods of communicating the safety information to the work force. (4 marks)

14 Explain the advantages of clear and concise communication when co-operating with members of the building team during a construction project. (5 marks)
15  a) State **two** signs of dry rot attack.  

b) Explain how to eradicate dry rot attack to prevent it from reoccurring.

16  a) State the name of the legislation that covers woodworking machinery.

b) State the name of the guidance document that is specific to woodworking machinery.

c) Identify **two** areas found in the guidance document identified in 16 b).
17 A new employee has started work and is required to operate the woodworking machine and complete a risk assessment. Explain **four** safety considerations to be documented in the risk assessment, when working on this machine. (4 marks)

18 While working on site, a carpenter is required to rip timber to width. During the sawing operation the timber binds on the saw blade.
   a) State **two** possible causes of this problem. (2 marks)

   b) Describe how the causes stated in 18 a) can be rectified. (4 marks)
19 State where the information can be found on the safe use of the narrow bandsaw. (4 marks)

20 Contact with the blade is a known risk when using circular saws. Describe three control measures that will minimise this risk. (3 marks)
A carpenter has been asked to make the gallows brackets as shown in Figure 1, for twelve front entrance canopy roofs. The timber has been delivered rough sawn. There is access to a small workshop with a radial arm saw, table saw, surface planer, thicknesser, band saw and a morticer.

Figure 1

Discuss the requirements of preparing and fabricating the gallows brackets. (12 marks)