

7906-001/501 Level 3 Site Carpentry

Version 1.1 – September 2017

Sample Mark Scheme

The correct responses to the multiple questions are in **BOLD**

- 1 Where is multi-foil insulation **most** commonly placed in a building?
 - a) Under joists.
 - b) Between joists.
 - c) Between rafters.
 - d) **Behind dry lining.**

- 2 What term is used to describe money held back until the end of the defects liability period?
 - a) Penalty clause.
 - b) Investment sum.
 - c) Staged payment.
 - d) **Retention sum.**

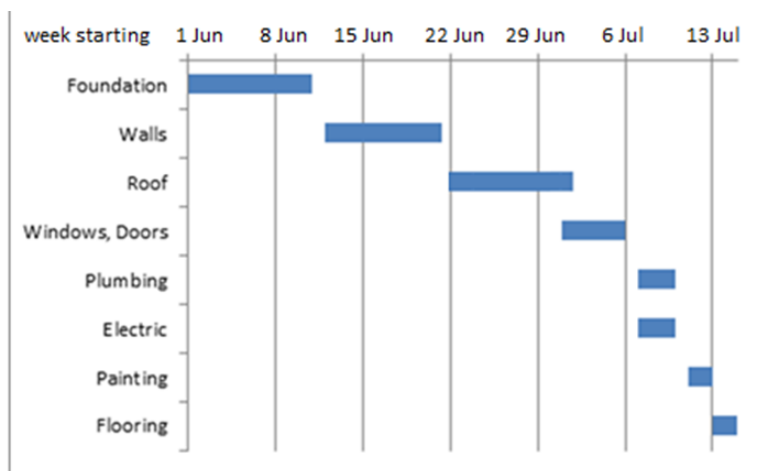


Figure 1

- 3 A lead time of three weeks is required when ordering roof trusses. Referring to Figure 1, what is the last date they can be ordered?
 - a) **25 May.**
 - b) 1 June.
 - c) 8 June.
 - d) 22 June.

- 4 The **main** purpose of a toolbox talk is to provide information on
 - a) staff benefits
 - b) welfare issues
 - c) **safety issues**
 - d) career opportunities.

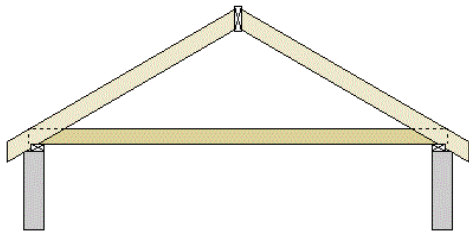


Figure 2

- 5 What type of roof is shown in Figure 2?
- a) Single.
 - b) Couple.
 - c) Bowstring.
 - d) Couple close.**
- 6 What component fixed to the top edge of rafters will reduce the roof pitch at the eaves?
- a) Tilt fillet.
 - b) Sprocket piece.**
 - c) Angle tie.
 - d) Saddle board

- | | |
|---|-----------|
| a) State one Regulation that applies to safe working in the construction industry. | (1 mark) |
| b) Identify one part of the building regulations and what it controls. | (2 marks) |

Answer

- a) Answer could include any **one** of the following for **one** mark
- Reporting Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR)
 - Control of Substances Hazardous to Health (COSHH)
 - Construction, Design and Management (CDM) regulations ,
 - Provision and Use of Work Equipment Regulations (PUWER)
 - Manual Handling Operations Regulations
 - Personal Protective Equipment (PPE) at Work Regulations
 - Work at Height Regulations
 - Control of Noise at Work Regulations
 - Control of Vibration at Work Regulations
 - Electricity at Work Regulations
 - Lifting operations and Lifting Equipment Regulations (LOLER)
- b) Answer could include any of the following for **two** marks, **One** mark for identifying the part and **one** mark for its content.
- Part A: Structural safety
 - Part B: Fire safety
 - Part C: Site preparation and damp proofing
 - Part D: Toxic substances
 - Part E: Soundproofing
 - Part F: Ventilation
 - Part G: Hygiene
 - Part H: Drainage and waste disposal
 - Part J: Heating appliances
 - Part K: Stairs, ramps and guards
 - Part L: Conservation of fuel and power
 - Part M: Access and facilities for people with disabilities
 - Part N: Glazing materials and protection
 - Part P: Electrical safety
 - Part R: High speed electronic communication networks

8	
Compare polyisocyanurate (PIR) with fibreglass when used for insulation purposes.	(5 marks)
<p>Answer Answer could include any of the following for five, with relevant comparison of the two materials</p> <ul style="list-style-type: none"> • PIR is a better insulator than fibreglass • PIR saves space as it thinner thicknesses can be used to achieve the same values as fibreglass • PIR is not itchy in use • PIR is less absorbent • PIR is rigid • Fibreglass is cheaper than PIR • Fibreglass contains recycled materials. 	

9	
Identify three factors that cause deterioration to timber.	(3 marks)
<p>Answer Answer could include any three of the following for three marks, one mark for each</p> <ul style="list-style-type: none"> • Weathering • Dry and wet rot • Infestation • Wear and tear • Design faults • Poor workmanship • Poor maintenance 	

10	
Explain factors that would inform the decision making process as to whether to replace or repair damaged timber components.	(5 marks)
<p>Answer Explanation could include the following factors for five marks, with justification for the reasons given.</p> <ul style="list-style-type: none"> • Structural damage • Non structural damage • Planning constraints • Cost of repair vs replacement • Extent of damage • Type of damage (eg dry rot) 	

11	
Name two sources of information that provides advice and guidance on safe working practices when using woodworking machinery.	(2 marks)
<p>Answer Answer could include any two of the following for two marks, one mark for each</p> <ul style="list-style-type: none"> • HSE • ACOP • BWF 	

- Manufacturer's instructions
- PUWER

12

Explain why training is essential prior to using woodworking machines.

(3 marks)

Answer

Explanation could include any of the following for **three** marks, with reasonable justification of their answer

- To meet the requirements of legislations
- Lack of training causes Accidents
- Ensure operator competence on individual machine
- Ensure quality of work when using individual machine
- Ensure manufacture's information is understood pertaining to the machine
- Understand the limitation of the machine

13

A client has bought an old house which has suffered from a lack of maintenance and repair. On entering the hall way there is strong damp musty odour, upon investigation it is found that, in one of the ground floor rooms, there is damage to the skirting. The skirting and adjacent floor boards display cuboidal cracking and is unstable. You have been asked to carry out remedial works

Discuss the likely causes of this decay and what actions should be taken to complete the remedial works

(12 marks)

Indicative content

Decay

- Dry rot

Possible causes

- Lack of air flow
- Excess moisture
- DPC broken down/bridged/absent
- Rising damp
- Porous brick work
- Fail pointing
- Defective drain/down pipe/gutter
- Leaking roof

Remedial action

- appropriate to the possible causes given by the candidate
- removal of all timber 1 m beyond all signs of fungal decay
- appropriate disposal to minimise recontamination
- all areas treated with fungicide
- plaster removal and wall treated as required
- replace with treated timber
- finish as required

Band 1 (1-4 marks)

Response shows limited understanding of the brief and the task. Candidate has not identified the decay and showed lack of knowledge of the causes of the decay. Listed some of the causes without much detail, lack clarity or structure. Showed little or no knowledge of remedial action. No consideration given to protection of the finished work.

To access higher marks, response showed some attempt at structuring their discussion in a logical order.

Band 2 (5- 8 marks)

Response shows good understanding of the brief and the task. Correctly identified the decay and showed some knowledge of the causes of the decay.

Showed some knowledge of remedial action with some detail and clarity. Discussion was clear and well structured. Some consideration given to protection of the finished work.

To access higher marks, the stages within the process is in a clear sequence.

Band 3 (9-12 marks)

Response shows extensive understanding of the brief and the task. Correctly identified the decay and showed in-depth knowledge of possible causes. Response listed all of the stages within the remedial action with comprehensive detail. Response was in a logical order. Use of component terminology was good and relevant to the brief. Detail consideration to given to protection of the finished work

In order to access higher marks, the response will include strong attention to detail through a cohesive and thorough discussion.