

7906-003/503 Level 3 Architectural Joinery

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.**

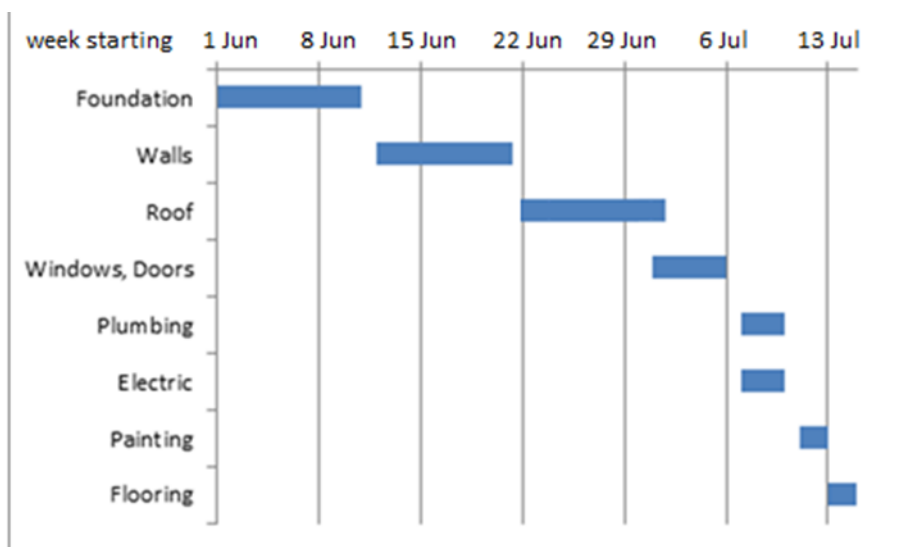


Figure 1

- 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.

- 5 Where is the dust extracted from on a bandsaw?
 - a) Below the table.
 - b) Above the table.
 - c) Behind the blade.
 - d) In front of the blade.**

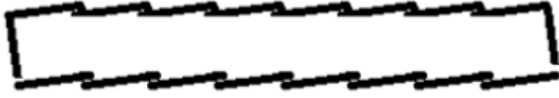


Figure 2

- 6 What is the cause of the morticing fault in Figure 2?
- a) Chisel and collar not matched.
 - b) Chisel not set square to machine bed.**
 - c) Chisel not set square to machine fence.
 - d) Chisel and collet not matched.

7	a) State one Regulation that applies to safe working in the construction industry. b) Identify one part of the building regulations and what it controls.	(1 mark) (2 marks)
<p>Answer</p> <p>a) Answer could include any one of the following for one mark</p> <ul style="list-style-type: none"> • 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) <p>b) Answer could include any two of the following for two marks. One mark for identifying the part and one mark for its content.</p> <ul style="list-style-type: none"> • 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 		

8	Compare polyisocyanurate (PIR) with fibreglass when used for insulation purposes.	(5 marks)
<p>Answer Answer could include any of the following for five marks, 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 		

9	a) Name two sources of information that provides advice and guidance on safe working practices when using woodworking machinery. b) Explain how to ensure a workshop is COSHH compliant.	(2 marks) (3 marks)
<p>Answer</p> <p>a) 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 • Manufacturers instructions • PUWER <p>b) Explanation could include any of the following for three marks, one mark for each with justification of how these ensures a workshop is COSHH compliant.</p> <ul style="list-style-type: none"> • Ventilation • Storage of flammable materials • Materials data sheets • Risk assessments • Toolbox talks • Hazards signage • LEV used appropriately 		

10	<p>A “one-off” Sapele traditional box frame window has been ordered. Only the approximate size has been obtained for pricing purposes. An operative has been asked to produce the window to match the existing. The timber has been ordered in and delivered.</p> <p>Discuss the planning and machining requirements to manufacture the window.</p>	(12 marks)
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Indicative content

Pre-checks

- Carry out site survey
- Check sizes and design

Setting out/planning

- Produce drawing
- Set out full size (rod)
- Produce cutting list
- Produce sundries list

Material conversion

- Mark out plank before cutting to minimise waste
- Carry out checks on machines before using
- Rip and crosscut planks to sawn sizes
- Face and edge timber
- Plane to size

Marking out

- Mark out all parts

Secondary machining

- Machine frame and cill parts
- Joint components
- Profile components

Band 1 (1 – 4 marks)

Response shows limited understanding of the brief and the task. Listed some of the stages in the process without much detail, lack clarity and structure. The stages in the process listed in no particular order and showed little or no knowledge of component terminology.

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. Listed most of the stages in the process with some detail and clarity. Discussion was clear and well structured. Use of component terminology was clear and relevant to the brief.

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. Response listed all of the stages in the process with comprehensive detail. Response was in a logical order, including the stages in the process. Use of component terminology was good and relevant to the brief.

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