

7906-31 Level 3 Advanced Technical Diploma in Architectural Joinery
7906-003 and 503 Level 3 in Architectural Joinery –Theory exam

March 2022 Mark Scheme

Q	Acceptable answer(s)	Guidance	Max marks	Ref
1	B	N/A	1	301.03.02
2	D	N/A	1	301.03.02
3	A	N/A	1	301.03.03
4	C	N/A	1	301.04.02
5	D	N/A	1	306.01.02
6	D	N/A	1	306.01.04
7	A	N/A	1	306.02.01
8	A	N/A	1	306.03.01
9	C	N/A	1	306.04.01
10	B	N/A	1	306.05.01

Q11	Acceptable answer:	Guidance:	Max marks	Ref
	<p>A response covering the following points for a maximum of three marks</p> <p>Permitted development rights are a national grant of <u>planning permission</u> (1 mark) which allow <u>certain building works</u> and <u>changes of use</u> to be carried out (1 mark) <u>without having to make a planning application.</u> (1 mark)</p>	N/A	3	301.01.02 AO1

Q12	Acceptable answer:	Guidance:	Max marks	Ref
	<p>The response as follows for one mark each, maximum two marks</p> <ul style="list-style-type: none"> • Open tendering • Closed tender/selective (any one) 	N/A	2	301.03.01 AO1

Q13	Acceptable answer:	Guidance:	Max marks	Ref
	<p>Any of the following up to a maximum of four marks, one mark for each</p> <ul style="list-style-type: none"> • Drawings • Risk assessments • Method statement • Machine maintenance log • Job sheet • Cutting list • Requisition sheets • Cutting plan • Specification • BOQ • Planning/gantt chart • Emails 		4	301.05.01 AO1

Q14	Acceptable answer:	Guidance:	Max marks	Ref
	<p>The response as follows for a maximum of six marks</p> <p>$24 \times 1.981 \times 0.1 \times 0.05 = 0.23772$ (1 mark) $12 \times .762 \times 0.1 \times 0.05 = 0.04572$ (1 mark) $12 \times 0.762 \times 0.225 \times 0.05 = 0.10287$ (1 mark) $0.23772 + 0.04572 + 0.10287 = 0.38631$ (1 mark)</p>	If the candidate gives the correct answer but does not show their working out 1 mark may be awarded	6	301.03.02 AO2

	0.38631+10% = 0.424941 m ³ (2 marks, one mark for the correct answer, one mark for the unit)			
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Q15	Acceptable answer:	Guidance:	Max marks	Ref
	<p>A response covering the following points for a maximum of six marks</p> <p>CAD drafting means that the drawings <u>need not be filed and stored</u> (1 mark).</p> <p>CAD drafting can be easily <u>saved on the computer/on a storage device</u> (1 mark) and can be <u>accessed from anywhere</u> with internet connection. (1 mark)</p> <p>It is an <u>environmentally friendly method</u>, (1 mark). It can be <u>easily changed and modified</u>. (1 mark) <u>It is a faster method</u> of drafting.(1 mark)</p> <p>CAD produces <u>high quality drawings/images</u>. (1 mark)</p> <p>CAD allows <u>files to be attached to emails for easy distribution</u> (1 mark)</p> <p>CAD allows for <u>standard items to be saved as blocks which can be reused in other projects</u> (1 mark)</p> <p>CAD allows for <u>easy magnification</u> of the project for <u>close inspection</u> (1 mark)</p> <p>CAD allows for <u>easy replication of components</u> (1 mark)</p>	N/A	6	301.06.02 AO2

Q16	Acceptable answer:	Guidance:	Max marks	Ref
	<p>Any two of the following for one mark each, maximum two marks</p> <ul style="list-style-type: none"> • Negative hook • Neutral hook • Combination 	TCT or HSS mention without context to cross cutting should not be accepted	2	306.02.02 AO1

Q17	Acceptable answer:	Guidance:	Max marks	Ref
	<p>A response covering the following points for a maximum of two marks</p> <ul style="list-style-type: none"> • <u>Riving knife</u> positioned with a <u>max gap of 8 mm</u> at table level/is 10% thicker than the plate of the blade/is 225 mm above 	N/A	2	306.02.02 AO1

	<p>the table level for blades 600 mm and no more than 25 mm from the top of the blade for blades small than 600 mm (1 mark)</p> <ul style="list-style-type: none"> The <u>crown guard</u> adjusted to cover the <u>root of the teeth</u>. (1 mark) 			
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Q18	Acceptable answer:	Guidance:	Max marks	Ref
	<p>Any three of the following for one mark each, maximum three marks</p> <ul style="list-style-type: none"> Plane the face (1 mark) of the material flat and straight Plane the edge (1 mark) a of the material square to the face Tapering of timber (1 mark) against a back stop Bevelling the edge of timber (1 mark) by canting the fence Rebating the timber (1 mark) if no other safer means is available 	N/A	3	306.04.01 AO1

Q19	Acceptable answer:	Guidance:	Max marks	Ref
	<p>A response as follows for one mark each for a maximum of two marks</p> <ul style="list-style-type: none"> Tapering Bevelling/angles 	N/A	2	306.04.03 AO1

Q20	Acceptable answer:	Guidance:	Max marks	Ref
	<p>Any two of the following for one mark each, to a maximum of two marks</p> <ul style="list-style-type: none"> Be adjustable in height Be robust enough for purpose Preferably be on three points of contact with the floor to prevent rocking Roller at the top 	N/A	2	306.05.02 AO1

Q21	Acceptable answer:	Guidance:	Max marks	Ref
	<p>A response covering the following points for a maximum of two marks</p> <p>The purpose is to gives <u>practical advice and guidance (1 mark)</u> on how the <u>law is complied with (1 mark)</u></p>	N/A	2	306.01.01 AO2

Q22	Acceptable answer:	Guidance:	Max marks	Ref
	<p>A response covering the following points for a maximum of three marks</p> <ul style="list-style-type: none"> • Isolate the machine (1 mark) • Place a prohibition notice on the machine (1 mark) • Report to supervisor and record in maintenance log (1 mark) 	N/A	3	306.01.03 AO2

Q23	Acceptable answer	Guidance:	Max marks	Ref
	<p>A response covering the following points for a maximum of five marks</p> <p><u>By identifying the hazards presented by machine. (1 mark)</u>. If the hazard could <u>present a reasonably foreseeable risk to a person, (1 mark)</u>. The risk assessment <u>should evaluate the nature of the injury, its severity (1 mark) and likelihood of occurrence (1 mark)</u>. Identify <u>control measures</u> that can be put in place to <u>overcome the risks</u> that the hazards present. (1 mark)</p> <p>Identify PPE requirements (1 mark)</p>	N/A	5	306.01.04 AO2

Q24	Acceptable answer:	Guidance:	Max marks	Ref
	<p>A response covering the following points for a maximum of six marks</p> <ul style="list-style-type: none"> • Isolate the machine (1 mark) • Raise the crown guard (1 mark) • Slide the fence away from the saw blade (1 mark) • Slide jig on saw bed either side of saw blade (1 mark) • adjust fence to edge of jig (1 mark) 	N/A	6	306.03.01 AO2

	<ul style="list-style-type: none"> Place off cut of glue block square stock onto jig and adjust crown guard to be as close as possible to top of glue block stock. (1 mark) Carry out pre-start checks (1 mark) Outfeed table (1 mark) 			
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Q25	Acceptable answer(s)	Guidance:	Max marks	Ref
	<p>Band 1 (1 – 4 marks) Response does not take the budget into consideration. An incomplete list/unworkable list of machines given with basic justification. The machine selected are insufficient or have omissions. To access higher marks, some consideration given to the whole manufacturing process and this is demonstrated in the machines selected</p> <p>Band 2 (5 – 8 marks) A workable list of machines given with good justification for the use of each. To access higher marks, detailed consideration given to the whole manufacturing process, and the budget.</p> <p>Band 3 (9 – 12 marks) Response has taken all the budget into consideration. A comprehensive/workable list of machines given with clear justification and use for each machine. In order to access higher marks, the response will include strong attention to detail through a cohesive and thorough discussion with consideration given to any excess from the budget.</p>	<p>Indicative content</p> <ul style="list-style-type: none"> That the machinery selected meets the budget Selecting machines that will allow for bespoke architectural joinery products <ul style="list-style-type: none"> Cross-cut Dimension saw Narrow band saw Spindle moulder Surface planer Thicknesser Hollow chisel morticer <p>Alternative workable machine selection should be considered provided it meets the requirement to make bespoke joinery products</p> <ul style="list-style-type: none"> Rationale for the selection of machines chosen 	12	AO4