



National
Qualifications
2019

2019 Practical Woodworking

National 5

Finalised Marking Instructions

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General marking principles for National 5 Practical Woodworking

This information is provided to help you understand the general principles you must apply when marking candidate responses to questions in this paper. These principles must be read in conjunction with the specific marking instructions for each question. The marking schemes are written to assist in determining the 'minimal acceptable answer' rather than listing every possible correct and incorrect answer.

Marks for each candidate response must **always** be assigned in line with these general marking principles and the specific marking instructions for the relevant question.

Marking should always be positive. This means that, for each candidate response, marks are accumulated for the demonstration of relevant skills, knowledge and understanding: they are not deducted from a maximum on the basis of errors or omissions.

- a) If a candidate response does not seem to be covered by either the principles or detailed marking instructions, and you are uncertain how to assess it, you must seek guidance from your team leader.
- b) To be awarded marks candidates must respond to the command word used in the question. For example, listing a valid point, even if correct, should not be awarded marks if the question asked for a description or explanation.
- c) For each candidate response, the following provides an overview of the marking principles. Refer to the specific marking instructions for further guidance on how these principles should be applied.
 - (i) **Questions that ask candidates to name/state**
Candidates must provide the answer in brief form. Candidates will normally be required to make the same number of statements as marks available in the question.
 - (ii) **Questions that ask candidates to describe**
Candidates must provide a statement or structure of characteristics and/or features. This should be more than an outline or a list. Candidates may refer to, for instance, a concept, situation, or facts in the context of, and appropriate to, the question. Candidates will normally be required to make the same number of factual/appropriate points as marks available in the question.
 - (iii) **Questions that ask candidates to explain**
Candidates must generally relate cause and effect and/or make relationships between things clear. This will be related to the context of the question or a specific area within a question.
- d) Marks should be awarded regardless of spelling as long as the meaning is unambiguous.

Question			Expected response	Max mark	Additional guidance
1.	(a)	(i)	A Stock	1	
		(ii)	B Stem	1	
	(b)		6	1	
	(c)		Accept any two of the following <ul style="list-style-type: none"> mark depth line of 30mm on end grain of wood set bottom of cutting chisel to line up with depth line tighten/set depth gauge/depth stop. 	2	Maximum of 1 mark may be awarded if candidate has not made reference to dimensions. 1 mark awarded for depth stop being set to 30mm. No mark awarded for mentioning marking chisel. Marks may be awarded for supporting sketches.
	(d)		Accept any three of the following <ul style="list-style-type: none"> check cutting chisel and drill are not damaged check cutting chisel is secure the handle/lever moves freely the bed moves freely in both directions drill is not clogged workpiece is secure check mortise bit does not touch bed. 	3	Any three correct responses. Each response is worth 1 mark. Do not accept references to chuck keys or guards. Candidates may achieve more than one mark within each response.
	(e)		Accept any two explanations from the following <ul style="list-style-type: none"> rebate helps with location of the sides when gluing/assembling less end grain visible so rebate looks better rebate provides more surface area/larger gluing area so joint will be stronger. 	2	
	(f)		Accept any two of the following <ul style="list-style-type: none"> extraction/dust bag is connected to the sander ensure dust bag is empty cord/power cable checked for damage no damage to casing ensure power tool is switched off before plugging in ensure handle is secure. 	2	Candidates may achieve more than one mark within each response. Also accept filter if candidate is referring to dust extraction. Any reference to sand paper is not a health and safety issue.
	(g)		Measure diagonals.	1	Marks may be awarded for supporting sketches.

Question		Expected response	Max mark	Additional guidance
2.	(a)	<p>Accept any three of the following</p> <ul style="list-style-type: none"> • reduce deforestation/protect rainforest from deforestation • softwoods are fast growing • encourages sustainable forests • lower level of transport pollution as softwoods can be grown/ sourced locally. 	3	
	(b)	<p>1 mark awarded for each adjustment</p> <p>Using the adjusting nut, set the blade to the correct depth of cut.</p> <p>Using the adjusting lever to make sure the blade is level.</p>	2	<p>Candidate must refer to component and adjustment made.</p> <p>Also accept any similar description using both of these parts including:</p> <ul style="list-style-type: none"> • set height/depth of blade, amount of waste material to be removed • making sure blade is straight <p>Marks should be awarded if candidate refers to adjuster nut as a screw/wheel etc.</p> <p>If candidate refers to setting both depth of cut and angle of blade without reference to specific parts of the plane award 1 mark.</p> <p>Marks may be awarded for supporting sketches.</p>
	(c)	Corner bridle.	1	Also accept bridle.
	(d)	<p>1 mark awarded for each stage</p> <ul style="list-style-type: none"> • saw down both shoulders to depth line • use coping saw/chisel to remove waste wood in centre. 	2	<p>Candidate can achieve 1 mark for reference to sawing and 1 mark for reference to removal of waste.</p> <p>First stage should not be awarded a mark if inappropriate saw is specified eg coping saw.</p> <p>Marks may be awarded for supporting sketches.</p>
	(e)	Tenon saw.	1	Accept any response referring to a backed saw eg gents, dovetail, razor.
	(f)	<p>Joint A - T halving.</p> <p>Joint B - Cross halving.</p> <p>Joint C - Dovetail halving.</p>	3	Joint C - accept dovetail.

Question		Expected response	Max mark	Additional guidance
	(g)	Tool A - Mallet. Tool B - Sawing board.	2	Tool A - accept wooden mallet/ carpenters mallet. Tool B - accept bench hook. Do not accept cutting board/cutting block/sawing block.
	(h)	To fill small holes/cracks/gaps to achieve a higher quality surface.	1	Also accept concealing scratches/ holes/cracks/gaps that cannot be removed by sanding alone.
	(i)	1 Medium Density Fibreboard (MDF). 2 Hardboard.	2	Do not accept chipboard or blockboard due to thickness of material.

Question		Expected response	Max mark	Additional guidance																																				
3.	(a)	<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="6">Cutting List</th> </tr> <tr> <th>Part</th> <th>Quantity</th> <th>Material</th> <th>Length</th> <th>Breadth</th> <th>Thickness</th> </tr> </thead> <tbody> <tr> <td>Top</td> <td>1</td> <td>red pine</td> <td>230</td> <td>150</td> <td>20</td> </tr> <tr> <td>Sides</td> <td>2</td> <td>red pine</td> <td>655</td> <td>150</td> <td>20</td> </tr> <tr> <td>Shelves</td> <td>2</td> <td>red pine</td> <td>170</td> <td>150</td> <td>20</td> </tr> <tr> <td>Base</td> <td>1</td> <td>red pine</td> <td>250</td> <td>150</td> <td>20</td> </tr> </tbody> </table>	Cutting List						Part	Quantity	Material	Length	Breadth	Thickness	Top	1	red pine	230	150	20	Sides	2	red pine	655	150	20	Shelves	2	red pine	170	150	20	Base	1	red pine	250	150	20	4	<p>Sides= 655 mm Quantity= 2 Shelves=170 mm Base= 250 mm</p>
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	(b)	<p>1 mark awarded for each description</p> <ul style="list-style-type: none"> Set marking gauge to approximately half way and create a spur mark; repeat the process creating a spur mark from the opposite edge Adjust the marking gauge so spur is approximately centred between the marks and repeat process of adjusting marking gauge until centred. 	2	<p>Answers should indicate making a spur mark from each edge and adjusting to achieve both marks on the centre.</p> <p>Marks may be awarded for supporting sketches.</p>																																				
	(c)	<p>Accept any one of the following</p> <ul style="list-style-type: none"> check tool for damage check the tool is sharp. 	1	<p>Damage may refer to any part of the chisel.</p>																																				
	(d)	Dowel	1																																					

Question			Expected response	Max mark	Additional guidance
3.	(e)	(i)	Twist	1	Also accept jobber. Do not accept twister/twisted.
		(ii)	Accept any two of the following methods <ul style="list-style-type: none"> • set depth gauge/stop on pillar drill to required depth • mask off drill at required depth • mark drill at required depth. 	2	Description must include setting/measuring depth using an appropriate method. Do not accept adjust height of table.
		(iii)	Accept any three of the following <ul style="list-style-type: none"> • goggles/visor/safety specs worn • hair tied back/loose clothing/jewellery tucked away • apron/protective clothing worn • ensure work area is clear • know location of emergency stop on machine. 	3	Candidates may achieve more than one mark within a response. Only one mark should be awarded from hair tied back/loose clothing/jewellery tucked away. PPE can refer to goggles or apron.
	(f)		Countersink	1	
	(g)		Accept any one of the following explanations <ul style="list-style-type: none"> • as the screw is flush the DVD storage unit will not wobble/rock • as the screw is flush it will not scratch the surface the DVD storage unit is sitting on. 	1	Responses relate to the screws being used to attach the base of the DVD storage unit therefore responses relating to aesthetics should be awarded 0 marks. Do not accept the screw sits flush.
	(h)		To assemble the product before gluing to check joints fit/make adjustments.	1	Also accept to assemble the product prior to gluing.
	(i)		PVA	1	Accept polyvinyl acetate.

Question			Expected response	Max mark	Additional guidance
4.	(a)	(i)	Accept any one of the following <ul style="list-style-type: none"> • layers/plies of wood glued together at 90 degrees to each other • odd number of layers glued together at 90 degrees to each other. 	1	Candidates must make reference to grain going in different directions on each layer. Accept layers/plies of wood glued together at right angles/perpendicular. A mark may be awarded for supporting sketches.
		(ii)	Small wood chips glued together and compressed into boards.	1	Answer must include compression, glue and wood particles. A mark may be awarded for supporting sketches.
	(b)	Accept any two of the following <ul style="list-style-type: none"> • board is stable, does not warp or twist • available in large, flat boards • cheaper/lower cost. 	2	1 mark awarded as long as candidate refers to low cost. Do not accept stronger.	
	(c)	(i)	Box one	1	
		(ii)	To raise the grain to achieve a better surface finish.	1	Also accept to raise the grain. Do not accept bring out the grain.
	(d)	(i)	240	1	
		(ii)	Finest/highest grade of paper achieves the smoothest surface finish.	1	Candidates can also reference comparison of grades.
	(e)	(i)	Accept any two of the following <ul style="list-style-type: none"> • wax • linseed oil • Danish oil. 	2	Must be appropriate to the wooden high chair. 1 mark may be awarded for each type of oil. Do not accept oil/vegetable oil Also accept shellac.

Question			Expected response	Max mark	Additional guidance
4.	(e)	(ii)	<p>Accept any explanation from the following</p> <p>The finish must be non-toxic/not poisonous as food will be consumed on the highchair. Explanation must refer to consumption/ingestion of harmful substances.</p> <p>Must be waterproof as the product will be exposed to liquids/foods/cleaning products.</p> <p>Must be easy to clean as it will be exposed to food etc.</p>	1	
	(f)		Knock down fittings.	1	

[END OF MARKING INSTRUCTION]