National
Qualifications
2025

Practical Woodworking

National 5

Question Paper Finalised Marking Instructions

General marking principles for National 5 Practical Woodworking

Always apply these general principles. Use them in conjunction with the detailed marking instructions, which identify the key features required in candidates' responses.

(a) Always use positive marking. This means candidates accumulate marks for the demonstration of relevant skills, knowledge and understanding; marks are not deducted for errors or omissions.

(b) 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.

Marking Instructions for each question

Question			Expected response	Max mark	Additional guidance
1.	(a)	(i)	Belt sander	**1**	Also accept band facer **Do not accept** sander
		(ii)	• abrasive paper is in good condition/intact • abrasive paper is secure/ tensioned correctly • sanding bed/table is clear • check sanding guide/fence is secure/not touching the belt • sanding guard is secure and is at the correct height • check emergency stop is clear • bed/table has been adjusted to the correct sanding angle • bed/table is secured in place • locate emergency stop • safe working area clear	**2**	**Do not accept** references to disengaging emergency stop/checking emergency stop **Do not accept** references to personal safety
		(iii)	• remove loose jewellery/clothing • wear apron • wear dust mask/face mask • wear goggles/eye protection	**2**	Candidates may achieve more than one mark within a response **Do not accept** simply naming eye protection/goggles **Do not accept** references to machine safety
	(b)		• keep the workpiece moving side to side • reduce the pressure used against the sanding belt • replace worn belt with a new belt • clean sanding belt if loaded or clogged with dust • reduce contact time between material and the sanding belt • remove material in small stages	**2**	

Question			Expected response	Max mark	Additional guidance
1.	(c)	(i)	Must be in the correct order: 1. Sand with course abrasive paper 2. Sand with medium/fine abrasive paper 3. Raise the grain 4. Sand again with fine abrasive paper	**3**	Also accept responses which state the correct grit of abrasive paper used or use of words rough and smooth Accept reference to any type of abrasive paper For stage **one**, references to removal of imperfections can attract a mark For stage **two**, references to achieve a finer/smoother finish can attract a mark For stage **four**, references to removal of raised grain can attract a mark **'Sand it'** can only achieve a maximum of **one mark** if used across all responses
		(ii)	• toxicity – ability to be food safe • aesthetic requirements - to change the colour, gloss or lustre of the wood or enhance the grain • protection from exposure to water/moisture • protection from sun exposure • location of use –interior or exterior • purpose of the project • durability required from certain conditions of use • ease of application – type of applicator available • equipment required - PPE • drying/curing time • scratch protection • penetration of wood • cost of purchase • coverage required • suitability for wood type	**2**	Candidates may achieve more than one mark within a response. Different aspects of aesthetics can achieve more than one mark

Question			Expected response	Max mark	Additional guidance
2.	(a)	(i)	Joint A – Dovetail halving Joint B – Haunch mortise and tenon Joint C – Mitre	**3**	**Do not accept** dovetail **Do not accept** mortise and tenon
		(ii)	Joint C/mitre	**1**	**Do not accept** if response has more than one box ticked
		(iii)	• joints can be taken apart again • quicker to manufacture, compared to traditional joints • easier to assemble/disassemble • don't require specialist tools/skills to assemble	**1**	
	(b)	(i)	Template	**1**	**Do not accept** stencil
		(ii)	• it's quicker - don't need to mark out each individual leg • reduces the risk of mistakes - all legs identical as using the same template • less skill required than traditional marking out methods - no requirement for tools	**2**	**Do not accept** answers which do not show a relationship or cause and effect One mark can be awarded for establishing cause and effect across both advantages More accurate in marking out the shape each time
		(iii)	X = 50mm	**1**	
		(iv)	Stage 1 — remove waste material first by cutting off corners using appropriate saw Stage 2 — sand to the line using a disk sander/band facer/belt sander	**2**	**One mark** awarded for each stage of the manufacturing process Candidates may achieve more than one mark within a response No marks awarded for reference to the marking out stage Accept reference to using a plane to remove material For stage two, accept the use of hand sanding/filing
	(c)	(i)	Bradawl	**1**	
		(ii)	• to make an indentation in the wood before drilling/inserting a fixing • to ensure accurate placement when inserting a fixing	**1**	Accept reference to creating a pilot hole Follow on rule applies from 2c(i)

Question			Expected response	Max mark	Additional guidance
2.	(d)	(i)	Accept any one of the following descriptions: • screw sits flush with the outside surface of the wood • reference to aesthetic purposes • safety benefit as no protruding screw head	**1**	
		(ii)	• made into manufactured boards • used as vice/cramp guards • used as a sacrificial board for drilling/applying a finish/planning • used as a sanding block • glued and cramped together to create larger boards for new models • used as a sawing aid	**1**	Waste wood can be reused for smaller projects
	(e)	(i)	G-cramp	**1**	Also accept G-clamp
		(ii)	Use of scrap wood to protect model	**1**	**Do not accept** 'scrap wood'

Question			Expected response	Max mark	Additional guidance
3.	(a)		Handle length = 234mm	**1**	
	(b)		• one unit of measurements on the drawing is twice the size in real life • the object is two times the size given • twice the size • the drawing is half the actual size	**1**	
	(c)		Accept any of the following: • part • quantity • length • breadth/width • thickness • material	**2**	Also accept reference to sizes/measurements

<table>
<tr><th colspan="3">Question</th><th>Expected response</th><th>Max mark</th><th>Additional guidance</th></tr>
<tr><td>4.</td><td>(a)</td><td></td><td>
<table>
<tr><th>Manufactured board</th><th>Construction method</th></tr>
<tr><td>Hardboard</td><td>Made from wood fibres which are steam heated together and pressed to form large sheets.</td></tr>
<tr><td>(i)
Blockboard</td><td>Strips of softwood glued together and covered with a veneer of hardwood.</td></tr>
<tr><td>(ii)
Plywood</td><td>Thin layers of wood glued together with each layer having its grain rotated up to 90 degrees to one another.</td></tr>
<tr><td>(iii)
Chipboard</td><td>Small wood chips glued together and compressed into boards.</td></tr>
<tr><td>(iv)
MDF</td><td>Wood fibres mixed with glue and compressed together under pressure.</td></tr>
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</td><td>1
1
1
1</td><td></td></tr>
<tr><td></td><td>(b)</td><td></td><td>Reference to marking out the divider with correct tools:

• measure with a steel rule and mark with a pencil the distance of the two holes on the end grain of the divider 20 mm from top and bottom edge
• square lines across the face of the material using try-square
• mark, using a marking gauge, a centre-line through the centre of the end grain</td><td>2</td><td>Candidates must refer to the correct measuring and marking out tools

Candidates may achieve marks without referencing sizes

Accept any two of three references to bullet points

Marks may be awarded for sketches only</td></tr>
<tr><td></td><td>(c)</td><td>(i)</td><td>50mm</td><td>1</td><td></td></tr>
<tr><td></td><td></td><td>(ii)</td><td>• rebate joint has a greater surface area than a butt joint
• rebate joint has two glued surfaces as opposed to one in a butt joint</td><td>1</td><td>Do not accept answers which do not show a relationship or cause and effect</td></tr>
</table>

Question			Expected response	Max mark	Additional guidance
4.	(c)	(iii)	• rebate joint is self-locating • butt joint may slip when gluing • can cramp along two directions with a rebate joint	**1**	Also accept answers which refer to location/ease of alignment
	(d)	(i)	• plough plane • combination plane	**1**	
		(ii)	Reference to any of the following: • the joint is stronger than gluing and pinning • supports load better • you do not see the edges of the base when fitted • aesthetic reasons – no nail heads showing, no base material showing • no need to wait for glue to dry • no need to apply glue to the groove • assists with assembly process • less likely to fail over time	**2**	One mark can be awarded for establishing a full description across both advantages No marks awarded for unqualified aesthetic responses e.g. 'neater'
		(iii)	Panel saw	**1**	

Question			Expected response	Max mark	Additional guidance
5.	(a)	(i)	Oak	**1**	
		(ii)	Not water-repellent materials, which will expand when exposed to outside conditions	**1**	Any reference to not being suitable to outside conditions eg references to durability
		(iii)	• comes from a sustainable source and is not endangered therefore won't have a negative effect on the environment • option C is unsustainably grown and is endangered therefore will have a negative effect on the environment • other sustainable option would have to be shipped from South America and generate a larger carbon footprint	**2**	**Do not accept** answers which do not show a relationship or cause and effect
	(b)	(i)	Reference to the following: • to find the centre of the blank ends • allows you to attach to the lathe by locating between centres • allows the blank to spin evenly when attached to the lathe	**1**	**Do not accept** answers which refer to guidelines for sawing
		(ii)	• allows the forked centre to locate in the grooves to drive the blank • allows the forked centre to grip the blank	**1**	**Do not accept** answers which do not show a relationship or cause and effect
		(iii)	• reduces the amount of roughing out required (quicker and easier process) • less wear on roughing out tools due to removal of some of the waste prior to turning • reduces the chance of wood chipping therefore achieving a cleaner cut • safer as it reduces the angle of cut when turning	**1**	**Do not accept** answers which do not show a relationship or cause and effect
	(c)	(i)	Gouge	**1**	
		(ii)	Parting chisel	**1**	
		(iii)	Skew chisel	**1**	

Question			Expected response	Max mark	Additional guidance
5.	(d)	(i)	Reference to any of the following: • the distance the tool rest is from the work piece (not touching) • the correct height - set the height to cut at the centre point • the tool rest is parallel to the work piece/correct angle • the tool rest is fixed in position	**2**	Candidates may achieve more than one mark within a response
		(ii)	Wax	**1**	Accept the following: • carnauba wax • beeswax
		(iii)	Less wasted material due to losing material on both sides when securing on the lathe	**1**	**Do not accept** answers which do not show a relationship or cause and effect

[END OF MARKING INSTRUCTIONS]