National
Qualifications
2024

2024 Practical Woodworking

National 5

Question Paper Finalised Marking Instructions

These marking instructions have been prepared by examination teams for use by SQA appointed markers when marking external course assessments.

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)		• They come from broadleaved trees • They are described as 'deciduous'	**2**	
	(b)		• Hard wearing • Durable • Scratch resistant • Gets harder with age • Takes a finish well • Strong	**2**	Also accept hard Also accept non-toxic Also accept references relating to aesthetic properties e.g. attractive colour or grain
	(c)		610 mm	**1**	
	(d)		Tape measure/measuring tape	**1**	Accept meter stick **Do not accept** template
	(e)		Candidate responses must clearly describe rotating/flipping material or sketch the three sections similar to the diagram below 	**1**	Waste wood **does not** need to be shown
	(f)		Sliding bevel	**1**	
	(g)		30°	**1**	Also accept 150°
	(h)		String and block	**1**	Also accept block and string
	(i)		Candidates may refer to any type of frame made with mitres (triangular, rectangular, square etc.) **Any two from** • Mitres will slide against each other • Mitres don't have shoulders for location • Mitres are hard to clamp without slipping/movement • Angles need to be very accurate/frame may be difficult to get square • Length of each side needs to be accurately cut to ensure mitres meet correctly	**2**	Also accept answers which refer to location/alignment
	(j)		Panel pin	**1**	Also accept pin **Do not** accept nail

Question			Expected response	Max mark	Additional guidance
1.	(k)		• Reduces waste • Reduces material requirement • Reduces deforestation • Any response which refers to recycling	**2**	Also accept answers which refer to lowering transport/shipping pollution, lowering carbon footprint **Do not** accept 'saves wood'

Question			Expected response	Max mark	Additional guidance
2.	(a)		• Easier to rebate as a single length • Difficult to clamp and rebate in short sections • Reduces production time when done as one process • Rebates are more consistent/uniform if cut on one piece or at the same time • Harder to rebate after assembly	**1**	**Do not accept** answers which do not show a relationship or cause and effect
	(b)		Part A — Sets the depth of the cut Part B — Sets the width of the cut or used to guide the plane along the edge of the wood	**2**	Part A- Also accept sets the depth of the blade/rebate
	(c)		Scraping	**1**	Also accept scraper
	(d)		Orbital sander Belt sander	**1**	Also accept palm sander **Do not accept** sander/disc sander, hand sander
	(e)		**Any two from** • Quicker to apply/dries more quickly therefore speeding up the finishing process • Ability to change colour so it can make cheaper wood look expensive • Ability to change colour to make commonplace woods look like less available/more expensive woods • Ability to change appearance so it can improve aesthetics • Non-shiny/matt finish/choice of colours gives a modern aesthetic • Changes colour while still being able to see the grain • Easier to apply than varnish therefore requires less skill/less likely to result in drips and runs	**2**	**Do not accept** answers which do not show a relationship or cause and effect.
	(f)		• Apply thin, even coats • Apply a number of coats • Apply with appropriate equipment eg sponge, cloth, brush • Apply with the grain • Apply coat and wipe off excess	**2**	
	(g)		**Any two from** • Use a mask • Wear goggles • Wear gloves • Work in a well-ventilated area • Protect work surfaces • Wear an apron	**2**	Also accept goggles,gloves, mask, apron, PPE, protective clothing

Question			Expected response	Max mark	Additional guidance
3.	(a)	(i)	Haunched mortise and tenon	**1**	
		(ii)	Half lap/lap/T halving	**1**	Also accept halving joint **Do not accept** corner halving joint
		(iii)	1:3	**1**	
		(iv)	• Neat/tidy/minimal appearance compared to alternative corner joints • Few visible edges so easier to hide errors • Strength increased by large gluing area • Secure location of haunch reduces chance of joint breaking, twisting or coming loose • Visible joint demonstrates skill of woodworker	**1**	**Do not accept** answers which do not show a relationship or cause and effect. **Do not accept** strong without justification
	(b)		Tool A — Forstner bit Tool B — Jigsaw	**2**	
	(c)		• Drill two holes using Forstner bit Or • Drill an access hole with the Forstner bit • Cut to shape using jigsaw • File/smooth edges using rasp	**3**	Marks may be awarded for sketches only Follow on rule applies from 3b
	(d)		• Support underside of workpiece with scrap material • Drill slowly (referring to feed or speed) • Use a sharp/new Forstner bit • Drill from both sides	**1**	Also accept drilling in steps
	(e)		**Any two from** • Check blade is secure • Check blade is not bent/damaged • Check cable/plug/casing for damage • Check jigsaw is switched off before plugging in/when not in use • Unplug before inserting/changing blade • Check guard is in place • Check it is correct type of blade • Check dust extraction is attached • Check speed is correct • Ensure cable is not near cutting blade before switching on	**2**	**Do not accept** check if blade is sharp

Question			Expected response	Max mark	Additional guidance
3.	(f)		• Coping saw • Spoke shave	**2**	Also accept half round file
	(g)		Cutting gauge	**1**	
	(h)		They have not sawn across the grain before attempting to remove waste	**1**	**Do not accept** answers which do not show a relationship or cause and effect
	(i)		Bullnose plane	**1**	
	(j)		• Cut across grain with marking knife • Cut v-notches • Cut a well • Setting up/clamping a guide/fence and cutting shoulders • Clamp a block of wood over the end of the joint to stop it getting accidentally cut • Saw shoulders/sides • Remove waste with chisel • Finish/level joint with hand router/granny's tooth • Cut corner/notch on the male part	**2**	Marks may be awarded for sketches only Cutting of well can be completed with either a chisel or Forstner bit Sawing of shoulders should not be awarded a mark if inappropriate saw is specified eg coping saw
	(k)	(i)	Sash cramp	**1**	Accept sash clamp
		(ii)	• Check excess glue has been removed • Check for square • Check all joint gaps are closed • Check joints are correctly seated/fit/aligned • Check cramps are tight/secure • Ensure all joints are clamped	**2**	**Do not accept** "make sure the workpiece is secure"
	(l)		Plywood	**1**	**Do not accept** plyboard
	(m)	(i)	• Made with waste material • Made with recycled material • Reduces deforestation	**1**	
		(ii)	• Not durable enough • Not as strong • Not impact resistant • Screws for hinges may rip out	**1**	Also accept references to appearance/aesthetics
	(n)		• Forests must be properly managed to ensure future supplies • To reduce deforestation • To preserve resources • To preserve rainforests • To protect natural habitats	**1**	

Question			Expected response	Max mark	Additional guidance
4.	(a)	(i)	Centre line	**1**	Also accept centre
		(ii)	Diameter	**1**	
	(b)		Scraper Gouge	**1**	Also accept round nose chisel
	(c)		Outside callipers	**1**	Also accept: steel rule, digital callipers, vernier callipers, micrometer **Do not accept** 'calliper' on its own
	(d)		**Any four from** • Headstock cover open • Trip hazard from cable • Trip hazard from bag • Mallet left on machine • Scraper left on machine • Emergency stop covered • Tool rest squint/unsafe distance • Tool rest touching workpiece/drive fork • Extraction not set up properly • Goggles stored in an unsafe location • Workpiece mounted on faceplate	**4**	**Do not accept** references to personal safety

[END OF MARKING INSTRUCTIONS]