

WOODWORK

6190
Paper 1

General comments

2021 candidates achieved a marginal improvement compared to the 2020 candidates, mainly in knowledge base questions. The question paper consisted of 25 marks related to sketching the answer. Overall sketching was the downfall for most candidates.

Comments on individual questions

Section A

- 1 (a) Candidates needed to consider the unsafe conditions seen in the picture of a workshop and not list general unsafe conditions.

The correct answers should've referred to:

- no proper organisation
- tools are not stored safely
- non-essential equipment in the danger zone
- waste materials on the floor
- materials not stored correctly and safely

- (b) (i) Safety feature refers to a part on the machine that's function is solely the safety of the user. The only correct answer was the:
guard

- (ii) The contents in a first aid kit refers to basic items only. Some learners listed items only found in specialized kits. The contents needed to list was:

- latex gloves
- pain tablets
- Bandages
- ointment
- Plasters
- Scissors

- 2 (a) The correct box to tick was ratchet brace but , many learners got this one wrong.

- (b) Correctly giving the use of the a ratchet brace seemed easy as the majority answered "to drill holes"

- (c) The tool shown in the pic could be confusing since there are other tools that look similar, but overall it was answered well. The two possible answers where:

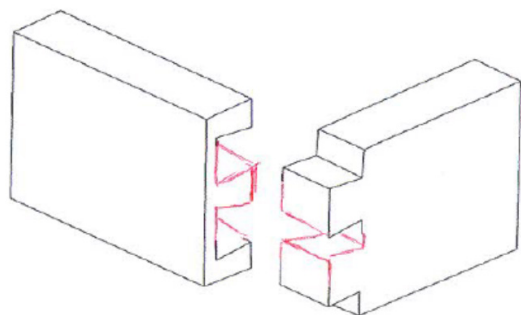
- Marking knife
- Striking knife

- 3 If candidates struggled to answer this question. It would simply mean they have not used or where not of this tool. To avoid misinterpreting the Lamello machine with an electric plane the examiner added few biscuits in the picture.

- 4 The following was expected and most of the learners got it correct.

- Wear none latex gloves before starting any procedures
- Stop Bleeding.
- Apply direct pressure on the cut or wound with a clean cloth, tissue, or piece of gauze until bleeding stops.
- Clean Cut or Wound. Gently clean with soap and warm water.
- Protect the Wound. Apply antibiotic cream to reduce risk of infection and cover with a sterile bandage.
- Call for a doctor when observed that injured person's condition does not change.

- 5 Candidates were asked to complete the dove tail joint. Some got it wrong, a few left it untouched and a handful got it correct



- 6 (a) (i) Candidates were asked to sketch a 3-ply board showing the direction of the layers. They can show the direction by drawing the wood grain or they could've made use of arrows.



- (b) Reasons for using preservatives were asked. Meaning the most basic of reasons would do. The expected answers were

- Enhancing the appearance
- Protection
- Prolonging life span
- Creating smooth surface

- (b) Question requested a T-bar clamp to be identified. Most candidates confused T-Bar and Sash clamp.

- 7 Candidates had to identify a flush hinge that appears in the grade 8 option B syllabus but most candidates got it wrong.

- 8 A table needed to be completed by filling in missing dimensions that was given in a drawing. It was disappointing to see that many candidates cannot interpret drawings.

Description	Quantity	Length	Width	Thickness
Sides	2	150	120	15
Dowel	2	160	10	10
Base	1	105	105	15
Back	1	205	130	15

- 9 Define natural seasoning. Well answered across all centres. The desired answer was :

- Natural seasoning is the process in which timber is seasoned by subjecting it to the natural elements such as air.

- 10 The question asked to state the use of a bench vice. Nearly all candidates aced this question. The desired answer was.

- Their sole purpose is to hold the object underneath, with grip and thereby work on the object. Simple examples of such works could be planing, drilling and sawing.

Section B

- 11 (a) (i) Conversion methods had to be identified. Through and through was identified correctly but many candidates confused radial sawing with quarter sawing.

(ii) Give advantages of radial sawing. Since many identified the method incorrectly they tended to get the advantages also wrong. The desired answer was.

- Figured oak of a result of a rays being exposed
- Quarter sawn board retain their shape better than plain sawn boards and tend to shrink less
- Making them well Certain hard wood cut in this fashion produce beautiful figured boards
- For suited for good class joinery work and flooring

(iii) This was of the best answered questions. The desired answer was:

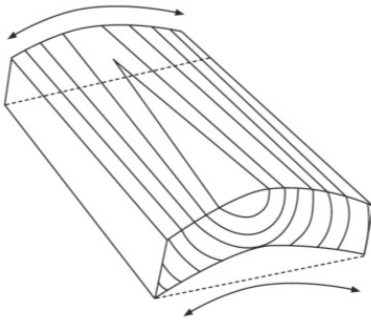
- Tree don't grow taller
- Bark become rough
- Dead branches appear in the crown
- Crown gets broader/leaves gets smaller

(b) (i) The question asked for the affects that knots have on timber regarding workability.

Most candidates did not consider "workability". Meaning they did not fully read the question. They should have referred to :

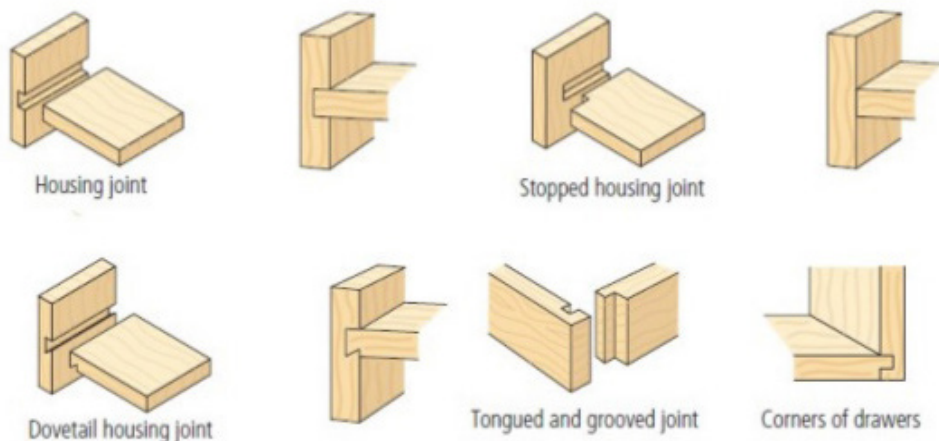
- Wood knots weaken wood strength.
- Cracking occurs
- Warping
- The ease of working the lumber.
- Defects that lower the lumber's value for structural purposes where strength is critical

(ii) This question was poorly answered although it's a simple knowledge question. but communicating via drawings seems to be a hiccup at most centres. A simply sketch of a cupped plank would have done.



12 (a) Many candidates can not sketch in explosive view and did not know what a housing joint is.

The desired answer should have shown:



(b) (i) Easy question that was actually previously asked in the paper, well answered.

Correct suggestion was:

- varnish
- oil based paint
- oil

- (ii) The reasons for using these finishes should have considered the bench and not General use.
Reasons should have been:
- protective against water/weather
 - for decoration purpose
 - or for the smooth finish

- (c) (i) The question asked to suggest a method of avoiding rust on a hinge. Many candidates Mentioned rust spray which incorrect cause rust spray is used on already rusted items. They should have answered:
- oil painted
 - grease and oil to block out moisture and air.
 - Use a rust-proof primer on the hinge.

- 13 (a) The candidates had identify deformed racks and give a remedy. Many candidates Interpreted the question wrong and added sketching onto the figure while the question asked to describe a possible remedy.

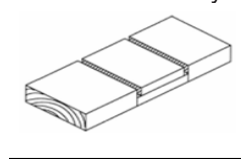
Possible remedies should have referred to :

- Built in a rail in the centre or at the front and back of the frame structure to support the shelves sufficiently or properly.

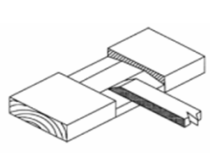
- (b) The question asked for a suitable adhesive with a reason, strange glues were mentioned whilst in woodwork we basically just use wood glue and the reason for using wood glue is for adhesive strength and its transparency.

- (c) Notes and sketches to describe the making of a joint was asked but once again the sketching was very disappointing. The figures below shows what was expected:

mark off accurately



cutting process: -



removing of waste

- (d) **State three reasons for using stain was requested for three marks. The expected answers** should have referred to :

- The primary purpose of stain is to colour wood, while offering certain protections as a result of the colouring and absorption of the stain deep into the wood.
- Perhaps the most common reason to use stain as protection is against ultraviolet light

- 14 (a) The question asked “what cause planks to split” in the context of defects although some Candidates mention man-made reasons such chopping, nailing etc. the desired answers had to

- Refer to the drying process been faulty
- The end grain have less moisture in relation with the rest of the planks that is why it is splitting.

- (b) Candidates had to list advantages of seasoning for three marks. Very few got full marks. Most received only two. They should have answered the following:

- To increase dimensional stability. Wood shrinks across the grain (not along the grain) when it dries.
- To reduce or eliminate attack by decay or stain. Wood that is dried below 20 percent moisture content is not susceptible to decay or sap staining.
- To reduce the weight..
- To increase the strength

- (c) (i) Basic sawing tools were requested but mixed the two answers. Possible reason is that the Label B was placed on top and label A at the bottom.

- A should have been any wood saw that cuts straight lines and
- B any wood saw that cut curves

(ii) the steps to producing the sides should have included notes and sketches showing Marking out as well as sawing procedure.

15 (a) (i) Unfortunately there was a missing chisel in the paper but if learners answered the two correct

They would receive a mark for the missing chisel. The correct names for the chisels were:

- Mortise Chisel
- Bevel edge
- Firmer Chisel

(ii) Candidates were asked show steps to repair a chisel. Most misunderstood the question or was never taught how to sharpen a chisel. Answers such as "use a grinder" is not acceptable.

Refer to :

- clamp chisel firmly and the tip until it's flat again
- use grinder wheel to get the desired shape
- use a file to get the final shape
- use coarse stone to refine the shape
- suitable sketches and notes
- use finer stone lastly

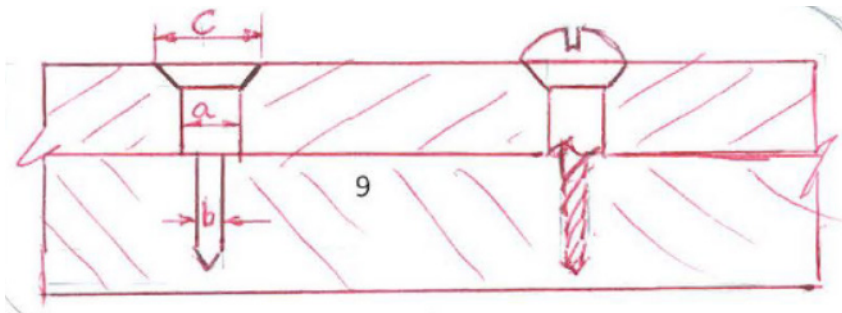
(b) Characteristics of dolf wood should have referred to:

- beautiful grain
- works and machine easily
- good for interior use and furniture making

(c) (i) Many candidates answered screw B incorrect although these screws appear in their grade 6 syllabus. The correct screw were.

- A - Round head
- B - Raised head

(ii) sketches and notes showing joining wood using a screw was asked for but most candidates did not include the pilot hole and shank hole. Sketches should've shown..



(d) The stated candidates to refer to leaves, seeds and uses. Many described the wood instead. Most lost 6 marks because of not reading the question properly.

A: Mopani trees

- leaves are broad
- seeds are flat
- wood is use for furniture making
- neat clear sketches

B: Dolf

- compound leaves/ovate-elliptic
- seeds are strong or round shaped
- wood is used for furniture and boat building
- neat clear sketches