



Junior Certificate Examination, 2015

Materials Technology (Wood)
Ordinary Level
Section A (40 marks)

Monday, 15 June
Afternoon, 2:00 - 4:00

Instructions

- (a) Answer any **sixteen** questions.*
- (b) All questions carry equal marks.*
- (c) Answer the questions in the spaces provided.*
- (d) This booklet **must** be handed up at the end of the examination.*
- (e) Write your examination number in the box provided and on all other pages used.*

Examination Number:

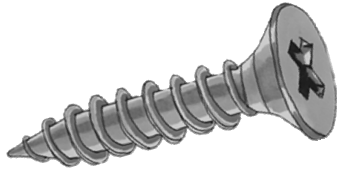
Centre Number

Section A	
1	
2	
3	
4	
5(a) or 5(b)	
Total	

SECTION A - 40 MARKS

Answer any 16 questions from this Section.
All questions carry equal marks.

1. Identify the screw type shown using a tick (✓).



Countersunk Head Screw

Raised Head Screw

Round Head Screw

2. Name the tool labelled **A** and explain what you would use it for.

NAME

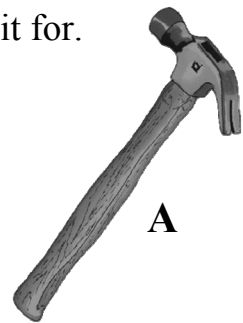
USE

OR

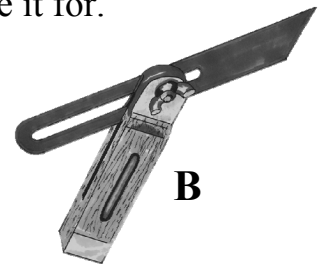
Name the tool labelled **B** and explain what you would use it for.

NAME

USE



A

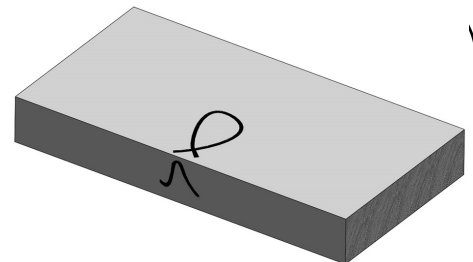


B

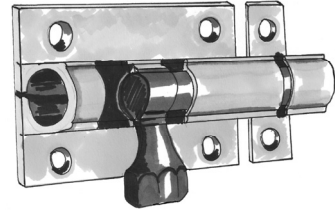
3. The diagram shows a piece of wood with the face-side mark and the face-edge mark on it.

State **one reason** for making these marks.

REASON



4. Name the fitting shown and explain what you would use it for.



NAME

USE

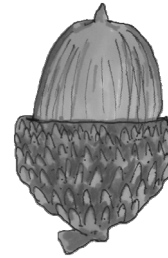
5. The diagrams **A** and **B** show the seeds from two common Irish trees. Select the correct name for each tree from the given list.

A



- Ash
- Oak
- Sycamore
- Pine
- Horse Chestnut

B



TREE A

TREE B

6. Name the power tool shown.

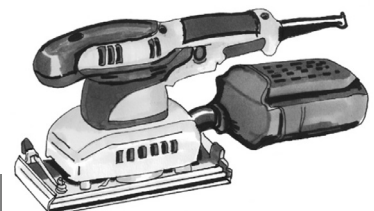


NAME

7. List **two** specific safety precautions that should be observed when using an electric sander.

1.

2.

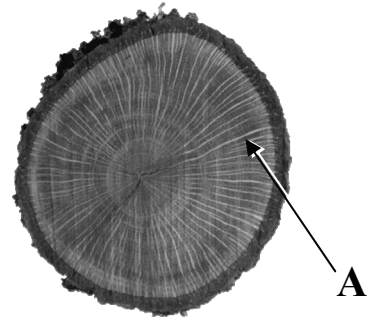


8. State **one** reason why it is better to use a long plane when planing a long piece of wood.



REASON

9. The diagram shows the cross-section of a tree.
What is the name of the lighter coloured lines going from the centre towards the bark, as shown at A?

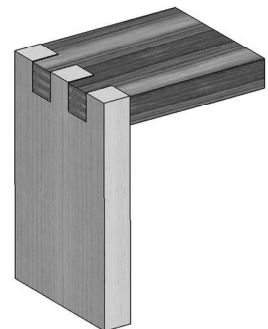


NAME

10. Show by means of a tick (✓) which of the defects on the left are **natural** defects caused as a tree grows and which are defects caused in **other** ways such as poor felling, conversion or seasoning.

	Natural Defects	Other Defects
Warping		
Knot		
End splits		
Spiral grain		
Heart rot		

11. Name the joint shown, which is commonly used in furniture making.



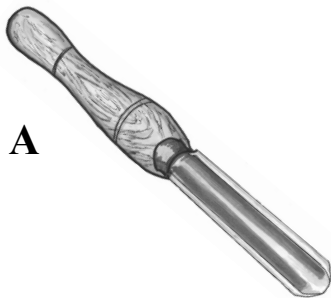
NAME

12. Name the method of timber conversion shown in the diagram.



NAME

13. From the list given, select the correct name for the turning tools shown.

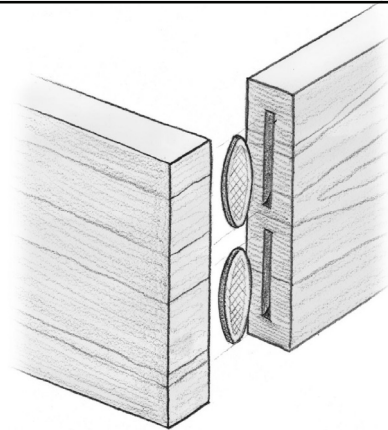


- Parting tool
- Skew chisel
- Square-end scraper
- Round scraper
- Roughing gouge

Tool A

Tool B

14. Name the joint shown.



NAME

15. The graphic on the right shows a pair of designer glasses with frames made from wood.

List **one** property of wood which makes it suitable for this use.



PROPERTY

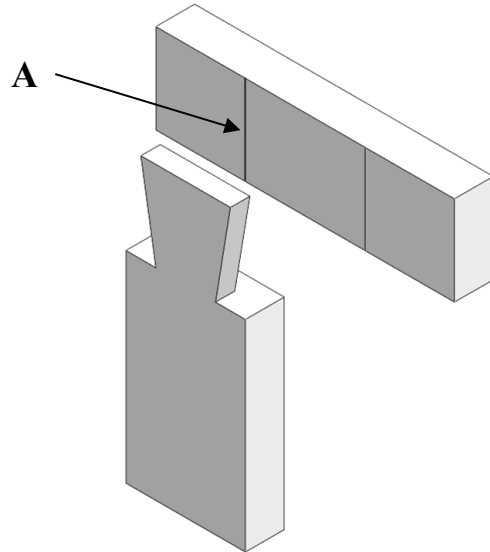
16. Give **one** reason why cork is a suitable material for making sanding blocks.



REASON

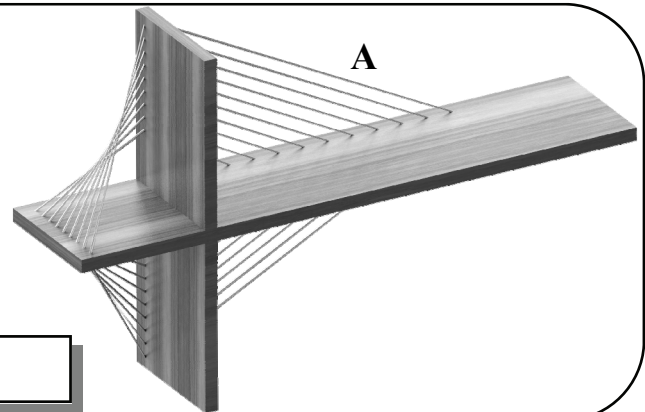
17. The diagram shows an incomplete dovetail halving joint.

Complete the diagram to show the marking out on part A.



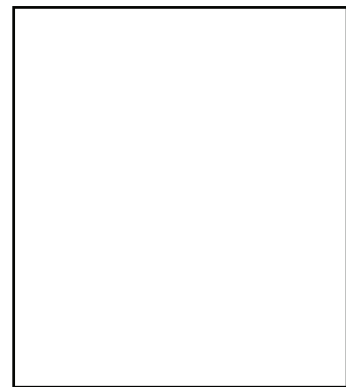
18. The diagram shows a shelf which is balanced by metal wires.

Name the **force** acting on the metal wires at A.



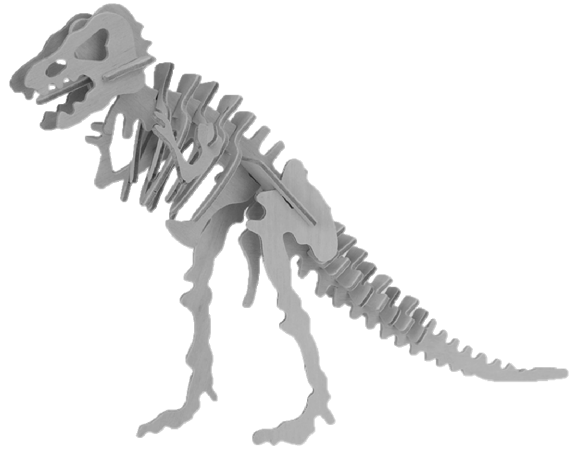
FORCE

19. In the space provided, draw the outline of a coniferous tree.



20. The diagram shows a 3D wooden dinosaur puzzle for children.

Name a machine that could be used to mass produce the small pieces of this puzzle so that they fit together accurately.



MACHINE

This booklet must be handed up at the end of the examination.

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