

An Roinn Oideachais agus Eolaíochta.

S53a

Junior Certificate Examination, 2001.**Materials Technology (Wood)****Monday 18 June - Morning 9.30 - 11.30****Section A - Ordinary Level.
40 marks.**

Examination number

INSTRUCTIONS

1. Answer any 16 questions from this section. All questions carry equal marks.
2. Answer questions in the spaces provided.
3. Write your examination number in the box provided and on all other pages used.
4. This booklet must be handed up at the end of the examination.

FOR EXAMINERS USE	
SECTION A - TOTAL	
1.	
2.	
3.	
4(a) or 4(b).	
5.	
Overall Total	

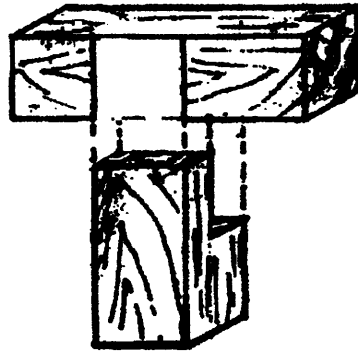
Centre number.

**THIS BOOKLET MUST BE
HANDED UP**

SECTION A - 40 MARKS

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

1. Complete the sketch to show a Tee-Halving Joint.



2. Name ONE of the tools labelled A and B in the diagrams and give its use.

A:- NAME

USE

OR

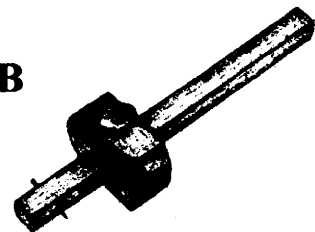
B:- NAME

USE

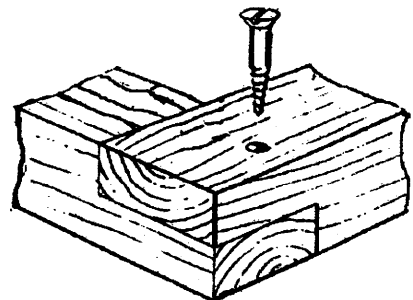
A



B

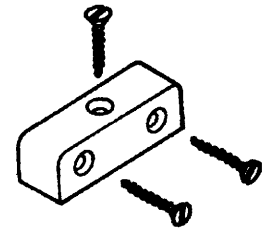


3. Why is it necessary to drill a hole for the screw, as shown in the diagram?



4. Name the fitting shown and give its correct use.

NAME



USE

5. State from which trees in the list these leaves come.

A



B



ASH
HOLLY
HORSECHESTNUT
LIME
OAK
SYCAMORE

NAME A

NAME B

6. Using arrows, show how the length of the screw shown in the diagram is measured.

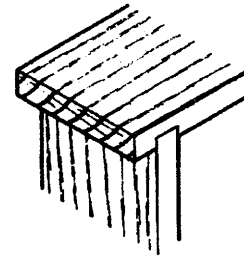


7. List **TWO** safety rules that must be followed when using an electric sander in the classroom.

1

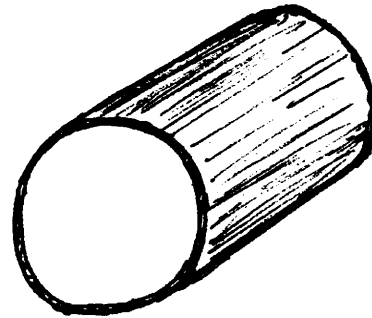
2

8. Name the joint shown in the diagram.

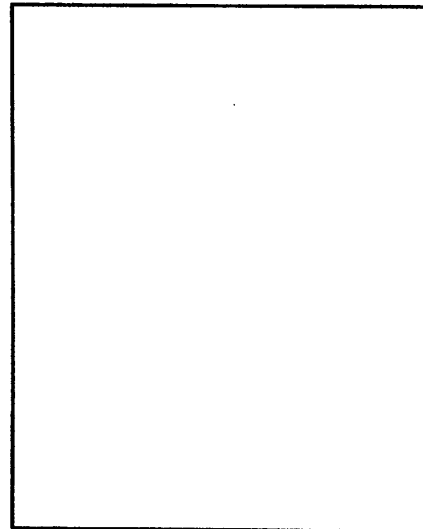


NAME

9. Complete the sketch to show the annual rings of the log shown in the diagram.



10. In the given space, draw the outline of a coniferous tree.



11. State **TWO** advantages that plywood has over solid wood.

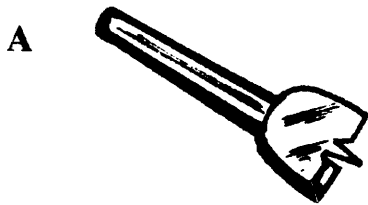
1

2

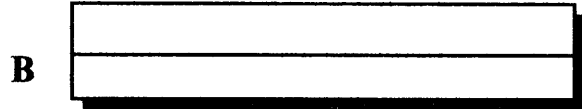
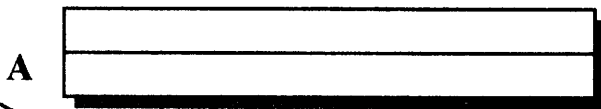
12. The sketch shows the cutting iron and the cap iron of a plane. Complete the sketch to show how the shaving is removed when planing the piece of wood.



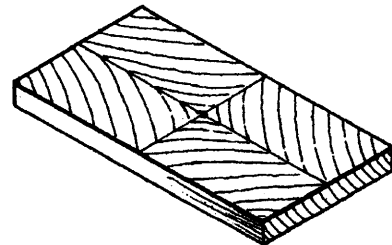
13. What is the function of the parts of the lathe labelled A and B in the diagrams?



B

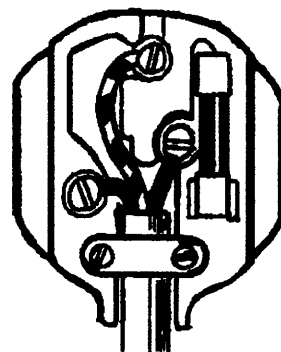


14. Name the thin sheets of wood on this decorative panel.

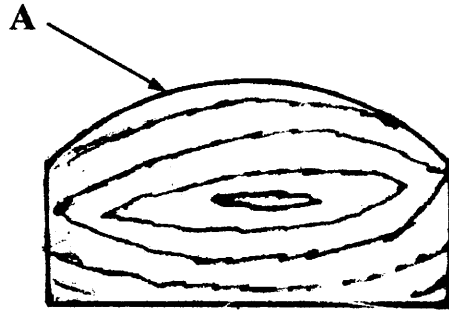


Name

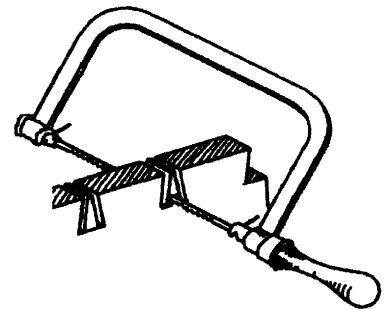
15. Using an arrow, show the **earth terminal** on the diagram of the plug shown.



16. Using arrows, show the correct directions for spoke shaving the curve at A to give a smooth finish.



17. Name the saw shown in the diagram.



NAME

18. Complete the sketch of the blade showing how the blade is attached to the handle of the chisel in this exploded view.



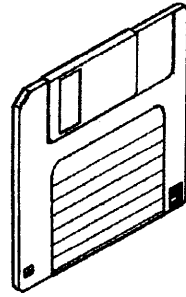
19. List **TWO** activities where protective eye-wear should be worn.



1

2

20. List **TWO** precautions that must be followed when storing floppy disks correctly.



1

2

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

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Junior Certificate Examination, 2001.

Materials Technology (Wood)

Monday 18 June - Morning 9.30 - 11.30

**Section B - Ordinary Level.
60 marks.**

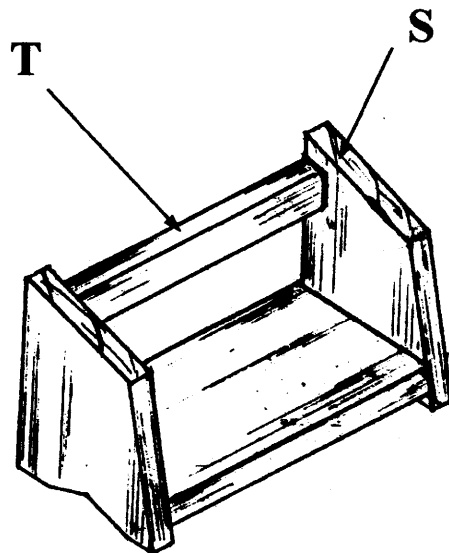
INSTRUCTIONS

1. Answer any **THREE** questions from this section. All questions carry equal marks.
2. Where sketches are required, they may be done freehand or on the graph paper provided.
3. Write your examination number on the answer book and on any other sheets used.

1. The diagram shows a small book stand made from solid wood.

(i) Draw a *neat freehand sketch* of a joint suitable for jointing the side S to the back T.

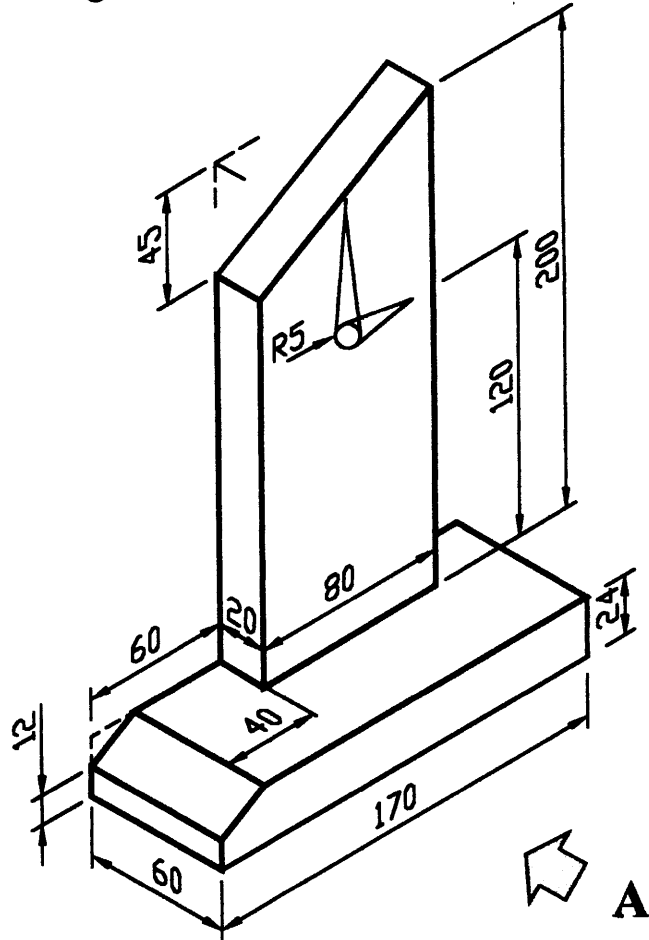
(ii) Make a *neat freehand sketch* of one tool used in the making of the joint. Name the tool and list its parts.



(iii) It is required to make a number of these book stands. Using notes and *neat freehand sketches* show a method for transferring the shape of the side S on to a rectangular piece of wood.

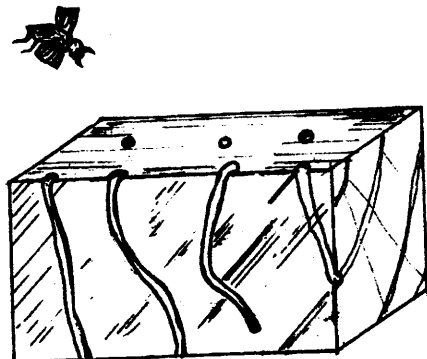
2. The diagram shows a pictorial drawing of a mantle clock made from solid wood.

- (i) Draw full size, a **Front Elevation** looking in the direction of arrow A.
- (ii) Project an **End Elevation** from this view.
- (iii) Include **FOUR** main dimensions on the drawing, showing clearly dimension lines and arrowheads.



3. The diagram shows a piece of wood that has been attacked by woodworm. Also shown is the adult beetle.

- (i) Explain, using notes and *neat freehand sketches*, how the holes are made in the wood by the woodworm.
- (ii) Describe **ONE** method of treating a piece of furniture to help prevent an attack by woodworm.
- (iii) Explain how you would treat a piece of old furniture that has been attacked by woodworm.

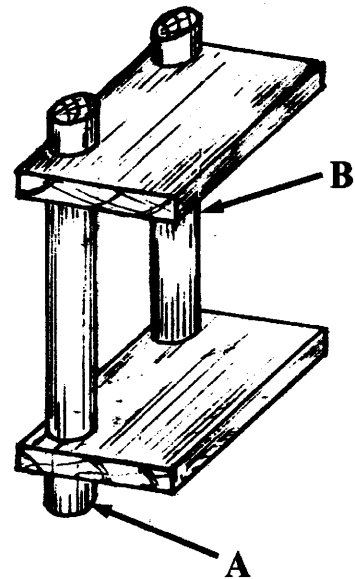


4. Answer either A or B

A.

The diagram shows a small shelf unit made from solid wood. The back pieces A and B have been turned on a lathe.

- (i) Describe, using notes and *neat freehand sketches*, how to prepare and turn the back piece A from a square piece of wood.
- (ii) Describe, using notes and *neat freehand sketches*, how to turn the back piece B to ensure that it is the same diameter as piece A.
- (iii) List **THREE** safety precautions that must be observed when turning wood on a lathe.



OR

B.

The diagram shows a panel with a carving of the outline of birds on its surface.

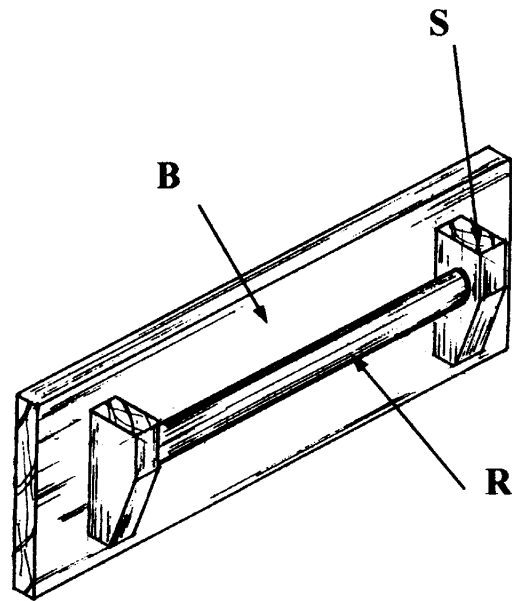
- (i) Name this type of carving.
- (ii) With the aid of notes and *neat freehand sketches*, show how the outline of the birds is transferred on to the panel before carving.
- (iii) Draw a *neat freehand sketch* of one tool used to make the carving. Name the tool and label its parts.



5. The diagram shows a towel rail made from solid wood.

(i) Show, by means of notes and *neat freehand sketches*, a method of joining side **S** to rail **R** to allow the rail to be removed.

(ii) Make a *neat freehand sketch* of one tool used in marking-out the towel rail.



(iii) Suggest an alternative design for the back piece **B** which will make the towel rail more attractive to look at.