



Junior Certificate Examination 2006

Materials Technology Wood
Higher Level
Section A (40 Marks)

Monday 19 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(a) or 4(b)	
5	
Total	

SECTION A - 40 MARKS

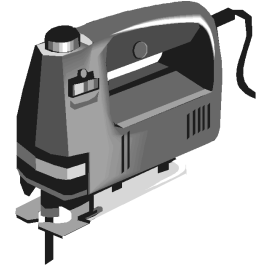
Answer any 16 questions from this section. All questions carry equal marks.

1. (i) Name the power tool shown in the diagram.

ANSWER

- (ii) State **ONE** purpose for which this tool is used.

PURPOSE



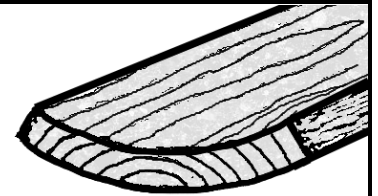
2. The board shown in the diagram has become distorted across its width.

- (i) What is this form of distortion commonly called?

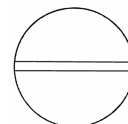
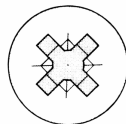
ANSWER

- (ii) What causes a board to distort in this manner?

ANSWER



3. (i) In the spaces provided, name the two screw slots shown in the diagrams.



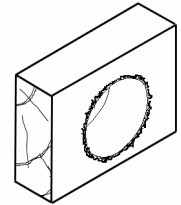
A

B

- (ii) State **ONE** advantage that slot A has over slot B.

ANSWER

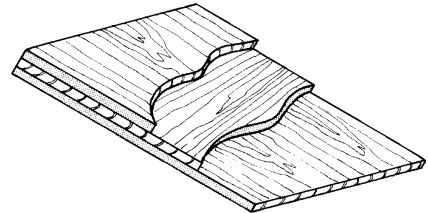
4. The boring of a hole through the piece of timber shown in the diagram has left rough, jagged edges.



Suggest one method that could be used to prevent this happening.

ANSWER

5. (i) Name the manufactured board shown in the diagram.

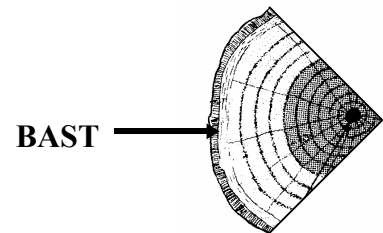


ANSWER

- (ii) State **ONE** advantage of this type of manufactured board.

ADVANTAGE

6. The **BAST** is a thin layer of cells located under the bark of a tree.



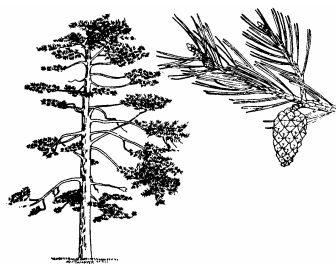
What is the function of the bast?

FUNCTION

7. The diagrams show the silhouette and seeds of three common Irish trees. Name the trees in the spaces provided.



A



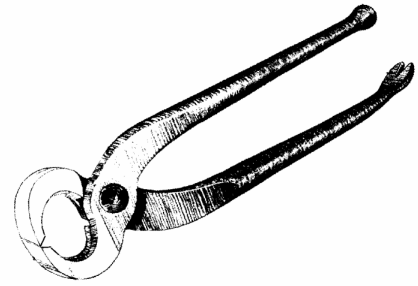
B



C

8. (i) Name the woodworking tool shown in the diagram.

ANSWER

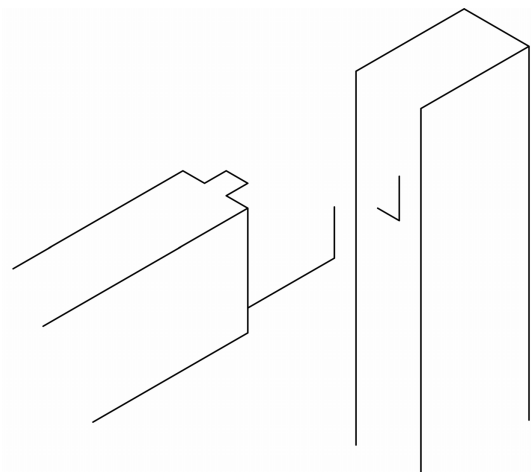


- (ii) For what purpose is this tool used?

PURPOSE

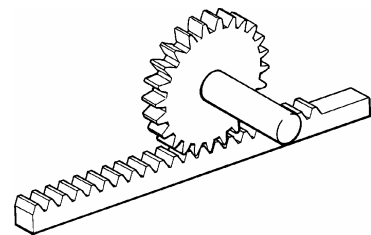
9. The diagram shows an incomplete exploded isometric sketch of a haunched Mortise and Tenon joint.

Complete the sketch of this joint.



10. (i) Name the gear mechanism shown in the diagram.

ANSWER



- (ii) Name a common woodworking machine that incorporates this type of mechanism.

ANSWER

11. CAM is widely used throughout the furniture production industry. What is the correct meaning of the abbreviation CAM?

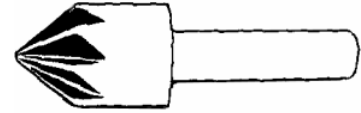
C

A

M

12. (i) Name the tool shown in the diagram.

ANSWER



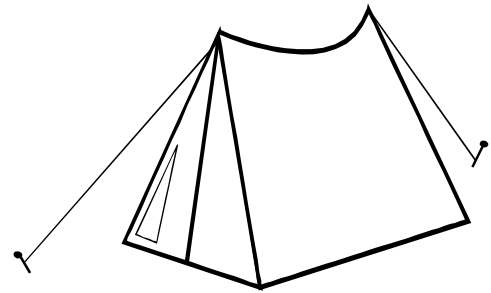
(ii) For what purpose is this tool used?

PURPOSE

13. The diagram shows a tent secured to the ground using ropes.

What is the correct name for the force acting in the ropes?

ANSWER

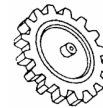


14. The diagrams show a number of items which are manufactured from plastics.

Match each item shown with the most appropriate plastic for its manufacture.

GLASS REINFORCED PLASTIC
POLYVINYL CHLORIDE
NYLON

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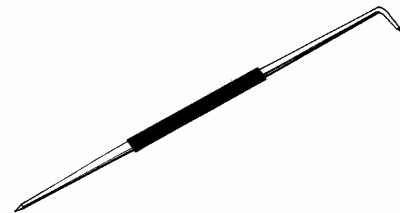


15. (i) Name the tool shown in the diagram.

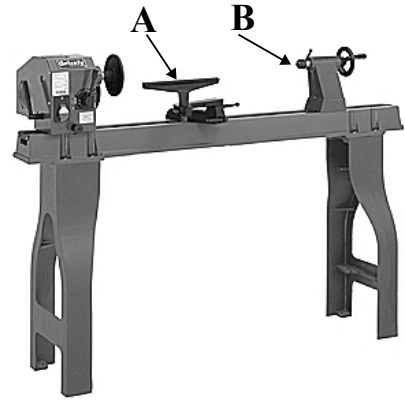
ANSWER

(ii) State an appropriate use for this tool.

ANSWER



16. (i) Name the parts of the woodturning lathe labelled **A** and **B** in the diagram.



A

B

(ii) State **ONE** function of each of the two parts **A** and **B**.

FUNCTION OF A

FUNCTION OF B

17. The diagram shows a veneered jewellery box.



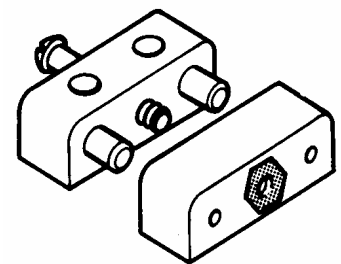
(i) Suggest a suitable adhesive for applying the veneer.

ADHESIVE

(ii) Give **ONE** reason for your choice of adhesive.

REASON

18. Shown in the diagram is a common woodwork fitting.



(i) Name the fitting.

ANSWER

(ii) State one advantage of using this type of fitting.

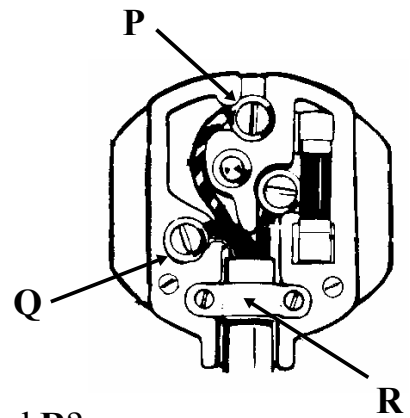
ADVANTAGE

19. Shown in the diagram is a plug-top.

(i) Name the plug terminals labelled P and Q.

P

Q

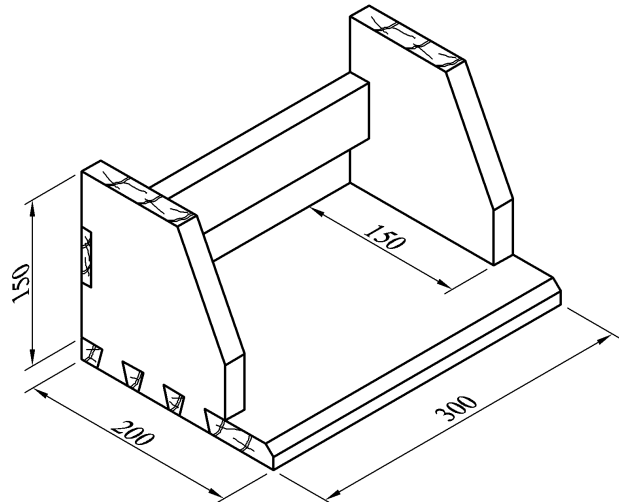


(ii) What is the function of the component labelled R?

FUNCTION

20. The diagram shows a book rack for a desktop .

Complete the following cutting list for the book rack.
(All material is 20 mm thick)



Description	Quantity	L	W	T
Base	1	300		20
Sides			150	20
Rail	1		50	

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