	Centre Number	Candidate Number
Candidate Name		

UNIVERSITY OF CAMBRIDGE LOCAL EXAMINATIONS SYNDICATE Joint Examination for the School Certificate and General Certificate of Education Ordinary Level

WOODWORK

6030/1

PAPER 1 Theory, Drawing and Design

OCTOBER/NOVEMBER SESSION 2001

2 hours 45 minutes

Additional materials:
A2 Drawing paper (1 sheet)
Answer paper
Coloured crayons
Metric scale rule, scale 1:5
Standard drawing equipment

TIME 2 hours 45 minutes

INSTRUCTIONS TO CANDIDATES

Write your name, Centre number and candidate number in the spaces at the top of this page and on all separate answer paper used.

Section I Part A

Answer all parts of Question 1.

Write your answers in the spaces provided on the question paper.

Section I Part B

Answer any two questions.

Write your answers on the separate answer paper provided.

Section II

Answer all parts of this section.

Use the A2 sheet of drawing paper prepared prior to the examination for your answers.

At the end of the examination, fasten the separate answer paper and drawing paper securely to the question paper.

INFORMATION FOR CANDIDATES

The number of marks is given in brackets [] at the end of each question or part question.

All dimensions are in millimetres.

FOR EXAMINER'S U			
Section	IA		
Section IB	2		
	3		
	4		
	5		
Section	[]		
TOTAL			

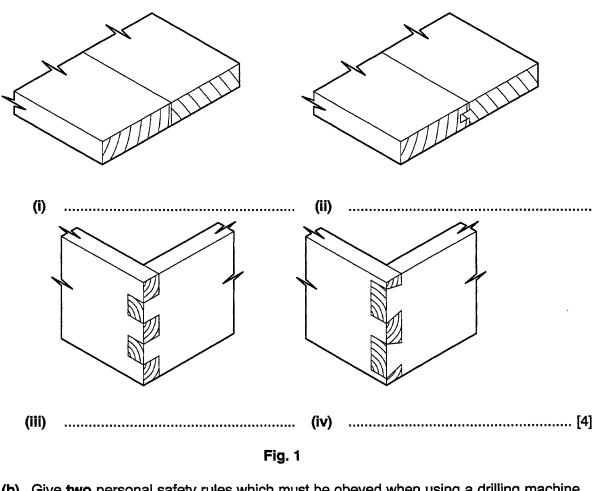
This question paper consists of 10 printed pages and 2 blank pages.

Section I Part A

Answer all questions from this part in the spaces provided on the question paper.

You are advised to spend no longer than 35 minutes on this part.

1 (a) Name the joints shown in Fig. 1.



(b)	Give two personal	safety rules which	must be obeyed	when using a drilling	g machine

Rule 2[2]

Rule 1

(c) Name the defects shown in Fig. 2.

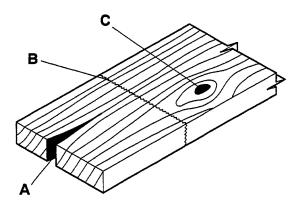
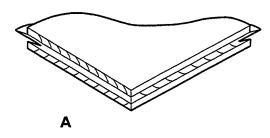


Fig. 2

Defect A	•••••	
Defect B		
Defect C	·	 [3

(d) Two manufactured boards are shown in Fig. 3.



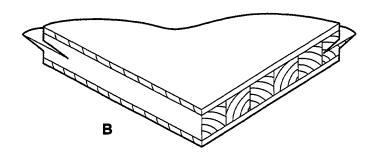


Fig. 3

(i) Name and give a suitable use for each board.

	Name of board A
	Suitable use of board A
	Name of board B
	Suitable use of board B [4]
(ii)	Explain briefly what the term manufactured board means

(e) Fig. 4 shows the cutting ends of two chisels.

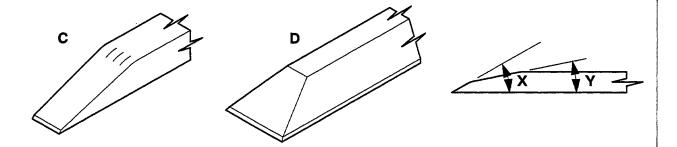


Fig. 4

Fig. 4a

(i) Name each chisel:

C

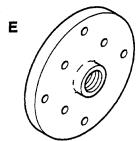
D[2]

(ii) The end of each chisel has two angles as shown in Fig. 4a, which form the cutting edge. Name both angles.

Angle X

Angle Y[2]

(f) Fig. 5 shows two machine parts which are used on a woodturning lathe.



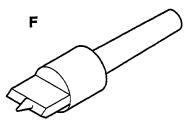


Fig. 5

Name each part and describe briefly its use.

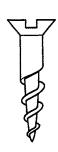
Name of E

Use of E

Name of F

Use of F[4]

(g) Fig. 6 shows a screw and the holes prepared, in two pieces of wood, to receive it.



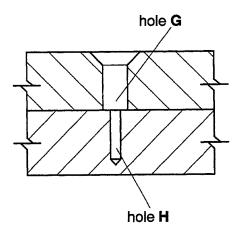


Fig. 6

(i)	Give the full name of the screw.
	[1]
(ii)	Name the two holes which are drilled in preparation for inserting the screw to hold two pieces of wood together.
	Hole G
	Hole H [2]

Section | Part B

Answer any two questions from this part on the separate answer paper provided.

You are advised to spend no longer than 35 minutes on this part.

2 Fig. 7 shows a design for a bedside clock. The body of the clock is to be made from hardwood.

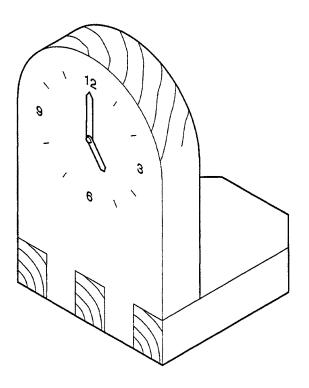


Fig. 7

Using notes and sketches explain how you would:

- (a) mark out the parts of the joint shown between the base and upright; [6]
- (b) cut and fit the joint. [6]

Name all tools used.

- 3 When preparing timber there are various stages which are worked through from the standing tree to boards ready to use in the workshops.
 - (a) Name the process of cutting down the tree. [1]
 - (b) Name the process of sawing the trunk into boards. [1]
 - (c) Name and show the method of sawing to gain the minimum waste. [2]
 - (d) Name and show the method of sawing the log to show the grain to best effect. [2]
 - (e) Name the method of drying timber quickly. Sketch and label the main features of this method.

[6]

4 Fig. 8 shows a small box and the position of two fittings labelled **A** which allow the lid of the box to open.

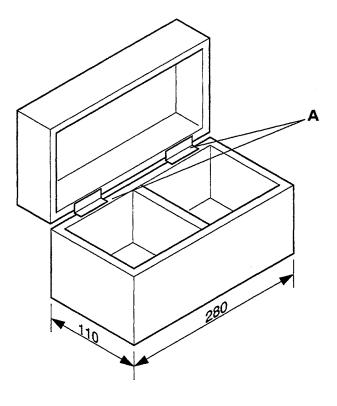


Fig. 8

- (a) Name the fittings used at A and draw a sketch of one to show the main details.
- (b) Using notes and sketches describe how you would mark out and cut one of the recesses to receive the fitting. Name all of the tools used. [8]

[4]

5 Fig. 9 shows a solid board which is to be used as a shelf to hold books.

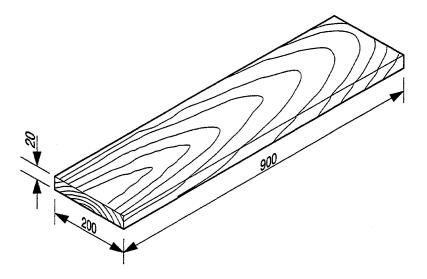


Fig. 9

Using notes and sketches describe:

- (a) two problems that are likely to occur when using a solid board in this situation; [4]
- (b) how the problems identified in part (a) would be overcome. Your solutions may include the use of additional materials. [8]

SECTION II IS ON PAGE 10

Section II Drawing and Design

Answer all questions on the previously prepared drawing paper.

Use only one side of the drawing paper.

You will be required to draw part of this section to a scale of 1:5.

You are advised to spend 1 hour 35 minutes on this section.

Fig. 10 on page 11 shows details of a small bathroom cabinet to be mounted on the wall. The carcase and the divisions are made from solid wood 15 mm thick. The two doors are made from 6 mm plywood and they slide in tracks.

The two drawers have fronts which are 20 mm thick and sides and backs which are 15 mm thick softwood. The cabinet has a 5 mm thick plywood back and this is rebated into the carcase. The sizes of the drawer parts are left to your discretion.

Part C.

On the right hand part of the drawing paper sketch freehand and approximately full size:

(i)	a design for a handle for the doors and the drawer fronts;	[5]
(ii)	an exploded view of the joint you would use to join one of the corners of the at A ;	carcase [8]
(iii)	shaping to the corner at B .	[3]

Part D.

Marks for Layout.

(a) On the left hand part of the drawing paper draw, in first or third angle projection, using a scale of 1:5: (Hidden detail is not required)

	0, 1	. o. triaden detail is not required)				
	(i)	a Front View in the direction of arrow Y;	[10]			
	(ii)	a Sectional End View on the line XX;	[11]			
	(iii)	a Plan.	[2]			
(b)	Add	to your drawing six main dimensions.	[3]			
(c)	(c) In the Title Box include, in suitable lettering:					
	(i)	a Title;				
	(ii)	your Name;				
	(iii)	your Examination Number;				
	(iv)	the Projection you have used.	[3]			
Marks for Quality.		[3]				

[2]

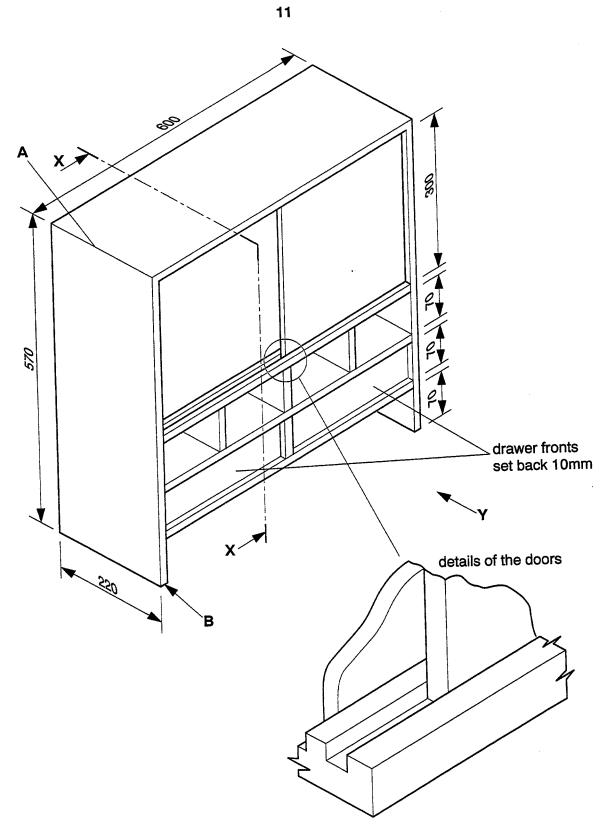


Fig. 10

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