

Centre Number	Candidate Number	Name
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UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS  
General Certificate of Education Ordinary Level

**WOODWORK**

**6030/01**

Paper 1 Theory, Drawing and Design

October/November 2004

**2 hours 45 minutes**

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

**READ THESE INSTRUCTIONS FIRST**

Write your Centre number, candidate number and name in the spaces at the top of this page and on all the work you hand in.

Write in dark blue or black pen in the spaces provided on the Question Paper.

You may use a soft pencil for any diagrams, graphs or rough working.

Do not use staples, paper clips, highlighters, glue or correction fluid.

**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 all your work securely together.

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 Use	
<b>Section IA</b>	
<b>Section IB</b>	2
	3
	4
	5
<b>Section II</b>	
<b>TOTAL</b>	

If you have been given a label, look at the details. If any details are incorrect or missing, please fill in your correct details in the space given at the top of this page.

Stick your personal label here, if provided.

This document consists of **9** printed pages and **3** blank pages.

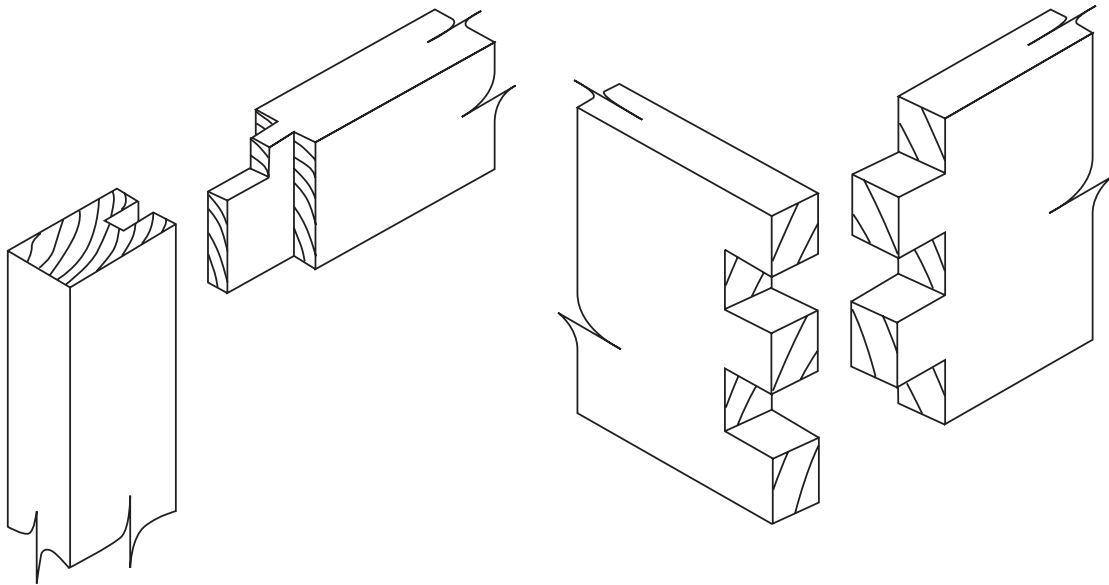


**Section I Part A**

Answer **all** questions in the spaces provided on the Question Paper.

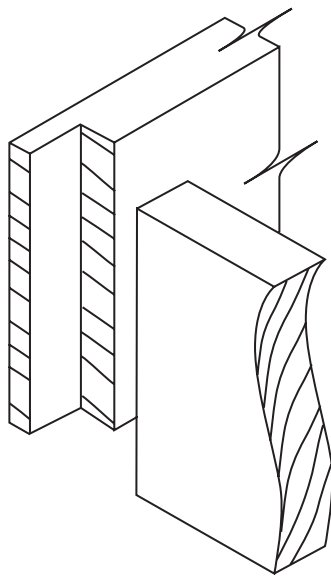
You are advised to spend no longer than 35 minutes on this Part.

1 (a) Give the full name of each of the joints shown in Fig. 1.

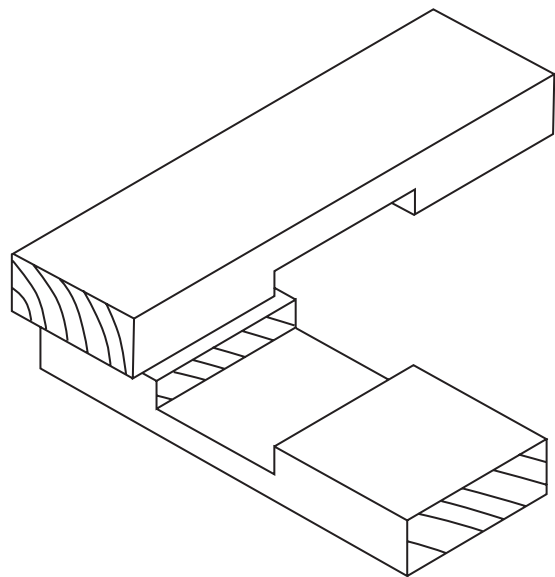


(i) .....  
.....

(ii) .....  
.....



(iii) .....  
.....



(iv) .....  
.....

[8]

**Fig. 1**

(b) Fig. 2 shows methods used when joining wood together.

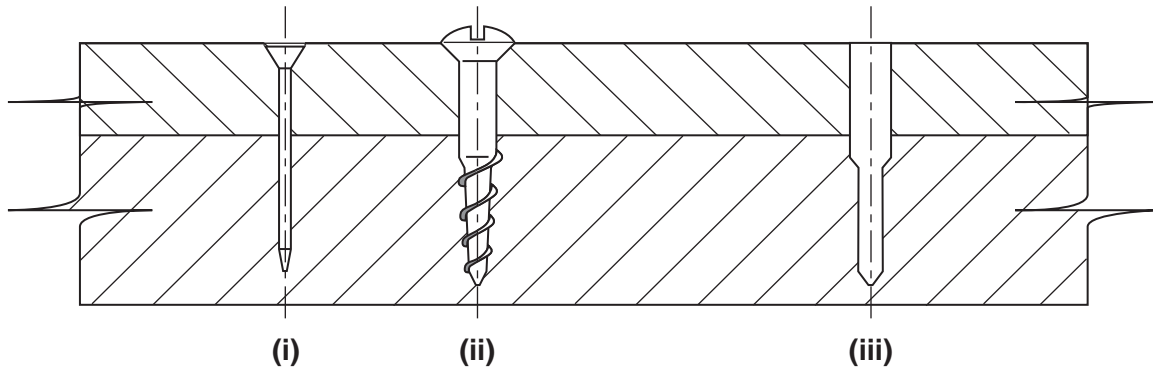


Fig. 2

Name of fixing (i) .....

Name of fixing (ii) .....

Name the two holes in (iii) drilled in preparation for inserting a screw .....

.....[4]

(c) Give the correct name for the tools shown in Fig. 3.

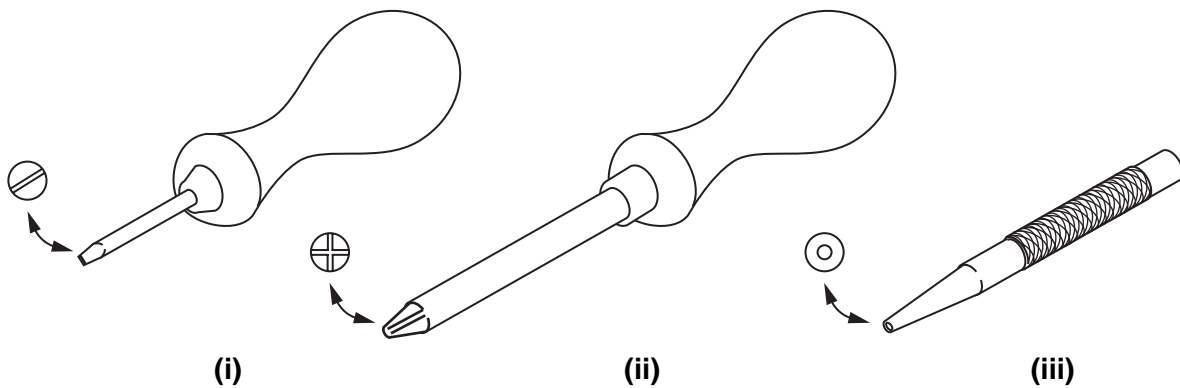


Fig. 3

Name of tool (i) .....

Name of tool (ii) .....

Name of tool (iii) .....

[3]

(d) Give the main use of each of the tools you have named in Fig. 3.

Use of tool (i) .....

Use of tool (ii) .....

Use of tool (iii) .....

[3]

(e) Give **two** safety rules that are important when working on a wood turning lathe.

Rule 1 .....

Rule 2 .....[2]

(f) You have been given a piece of timber shown in Fig. 4. The timber has to be prepared to a size of 300 × 30 × 20.

Explain briefly the stages of preparing the timber to size.

.....  
.....  
.....  
.....  
.....[5]

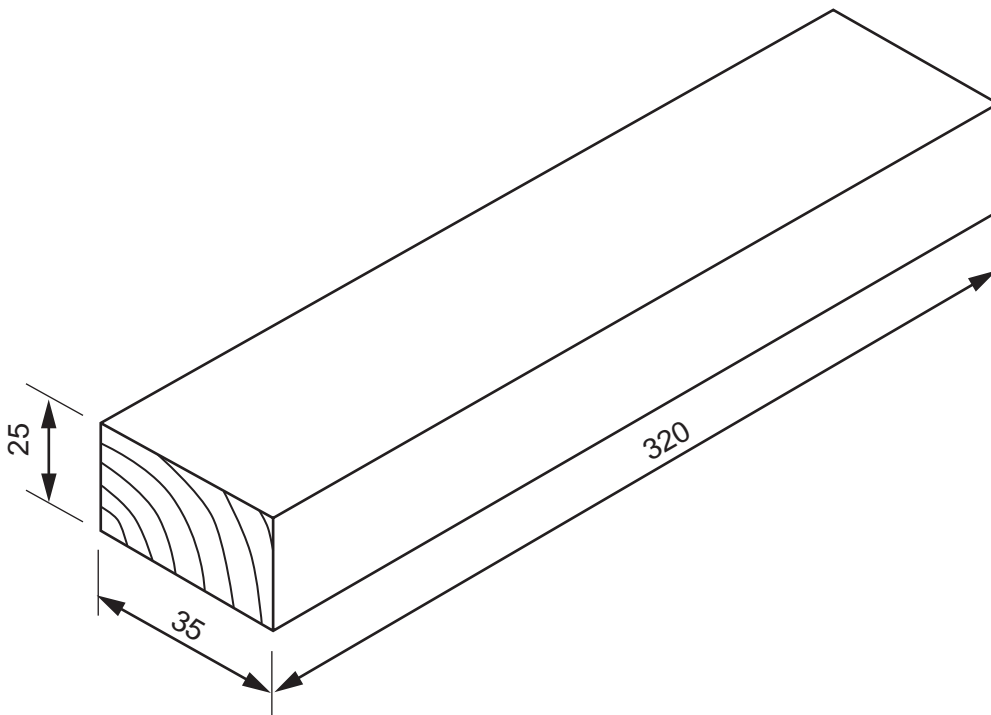


Fig. 4

## Section I Part B

Answer any **two** questions from this section on the separate Answer Paper provided.

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

- 2 Fig. 5 shows a Jewellery Box made out of solid hardwood.

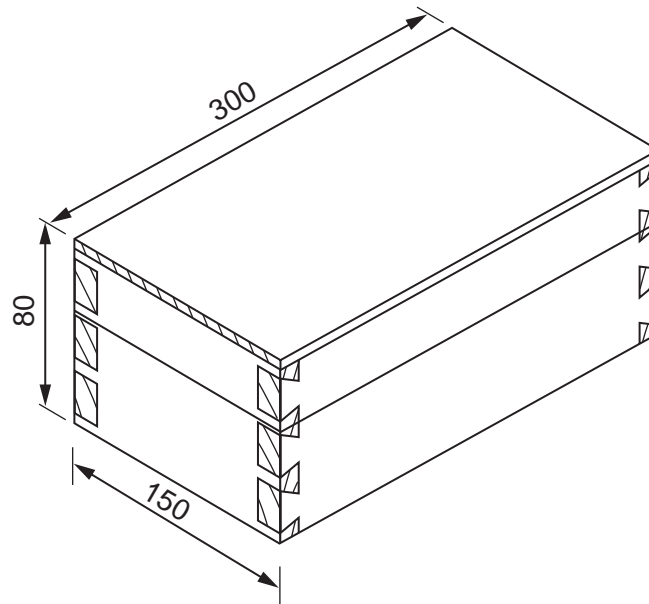
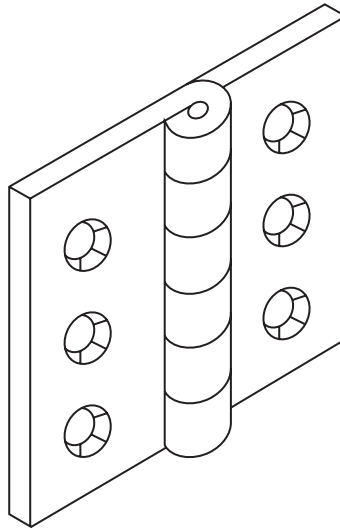


Fig. 5

The top of the box is made from a piece of hardwood 15 mm thick. This piece of wood has interlocking grain and needs to be cleaned up and prepared to receive a finish.

- (a) Name the plane you would use for fine cleaning up. [1]
- (b) Explain how you would set this plane for a fine cut. [3]
- (c) Explain how you would hold the work and in which direction you would plane. [3]
- (d) Explain briefly the stages you would go through after planing to prepare the surface to receive a finish. [5]
- 3 Timber has to go through various processes from the tree to the workshop.
- (a) Name the process of:
- (i) cutting down a tree; [1]
- (ii) cutting the log into planks. [1]
- (b) Use notes and sketches to describe the **two** main methods of seasoning planks. [10]

4 Fig. 6 shows a fixing.

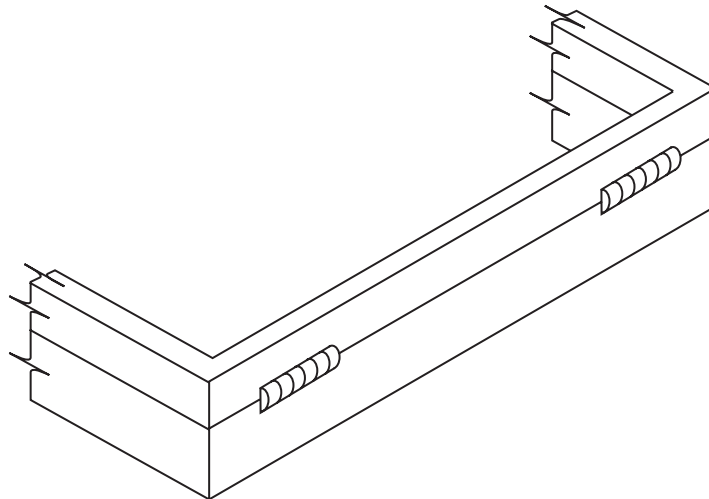


**Fig. 6**

- (a) Name the type of fixing. [1]
- (b) Name the most suitable material for making this fixing if it is to be used on an acid hardwood. [1]
- (c) Fig. 7 shows a pair of the fixings on a small box. Use notes and sketches to show the method of marking out and fitting one of the fixings to the box.

Name all the tools used.

[10]



**Fig. 7**

5 There are several ways of holding wood whilst it is being worked.

Name, sketch and describe each method of holding work in the following situations.

Include any aids you would use for support or to prevent the wood from being damaged.

(a) Sawing small joints using hand tools. [4]

(b) Holding wood securely on top of a bench whilst it is being worked. [4]

(c) Holding wide boards when gluing. [4]

## Section II Drawing and Design

Answer **all** questions from this section 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 the scale of **1 : 5**

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

On your Drawing Paper use the space to the right of the vertical line to answer **Part C** of this section and the space to the left to answer **Part D**.

The drawing on page 9, Fig. 8, shows details of a coffee table.

The table has a top made from faced manufactured board which is suitably edged as shown with solid hardwood. The under frame is made from solid hardwood 50 × 20. The lower cross rails are solid wood 50 × 20. There is a drawer suspended from the under frame. There are two rails 50 × 20 to support the drawer runners. The drawer is of traditional construction and can be accessed from either side of the table. The front of the drawer measures 350 long and 120 deep and the sides are 350 long. Any sizes not given are left to your discretion.

### Part C

On the right hand part of your Drawing Paper, sketch freehand and approximately half full size:

- (i) an exploded view of the joint you would use to join one of the corners of the under frame at **A**; [8]
- (ii) the joint you would use to join the side of the drawer to the front; [5]
- (iii) shaping of the end of the table top to improve the appearance. [3]

### Part D

(a) Draw in first or third angle projection, using a scale of 1 : 5 (hidden detail is not required):

- (i) a Front View in the direction of arrow **Y**; [10]
- (ii) a Sectional End View on the line **XX** to include details of the drawer; [11]
- (iii) a Plan. [2]

(b) Add to your drawings **six** main dimensions. [3]

(c) In the Title Box include the following details in suitable lettering:

- (i) a Title;
- (ii) your Name;
- (iii) your Examination Number;
- (iv) the projection you have used. [3]

Marks for Quality [3]

Marks for Layout [2]



9

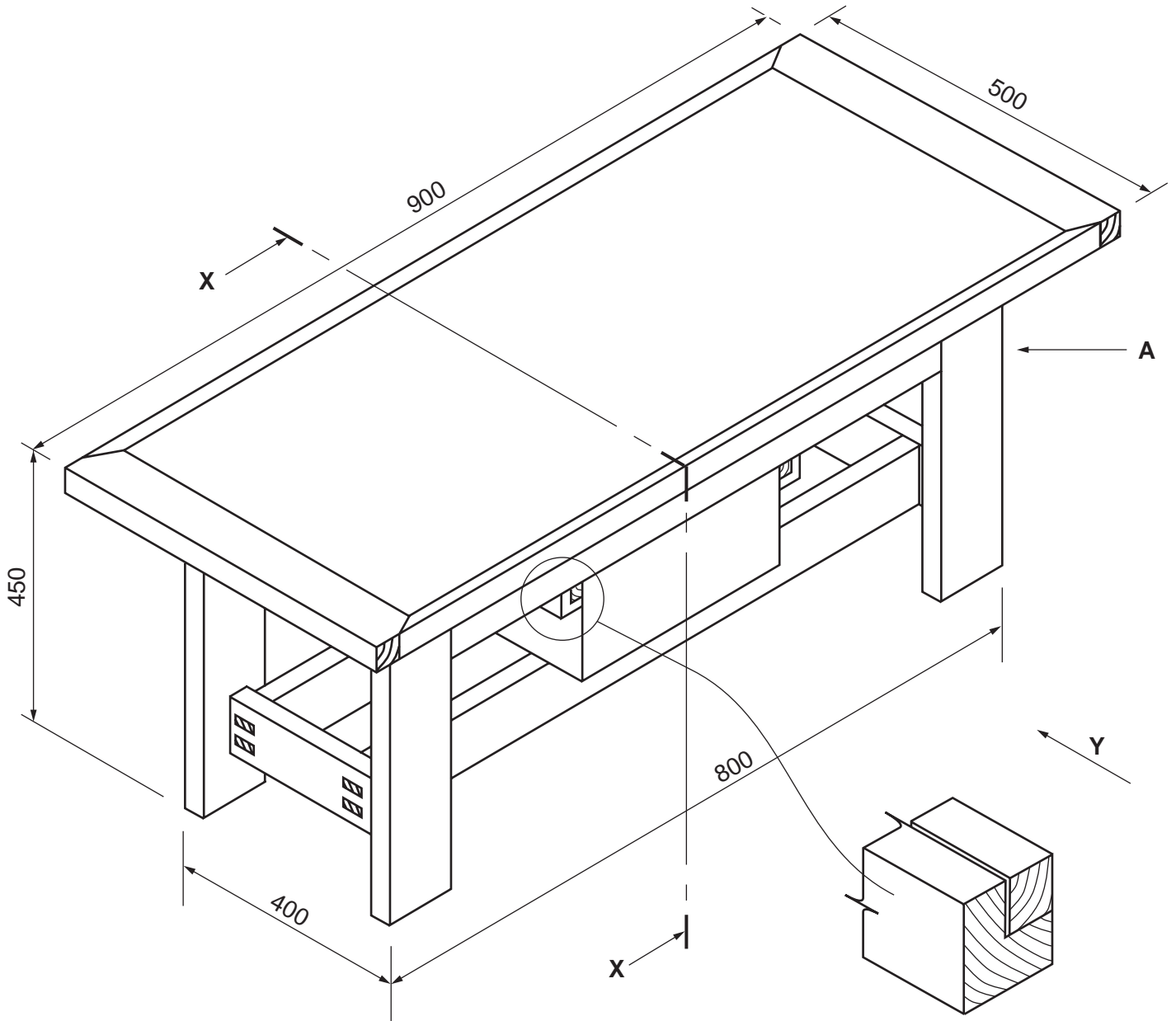


Fig. 8





