

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 2006

2 hours 45 minutes

Candidates answer Section 1 Part A on the Question Paper.

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 on all the work you hand in.

Write in dark blue or black pen.

You may use a 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** the questions in this section.

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.

All dimensions are in millimetres.

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.

For Examiner's Use	
Section IA	
Section IB	8
	9
	10
	11
Section II	
TOTAL	

This document consists of **12** printed pages and **4** blank pages.

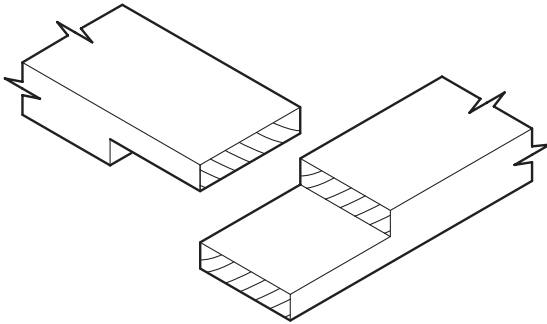


Section I Part A

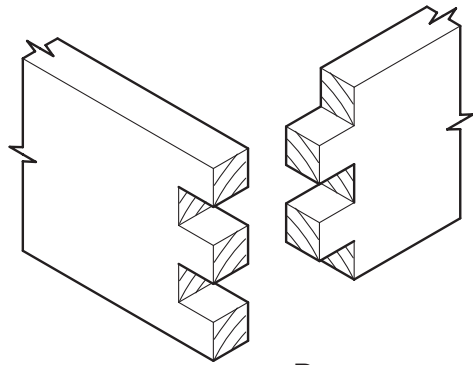
Answer **all** questions from this Part in the spaces provided on the Question Paper.

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

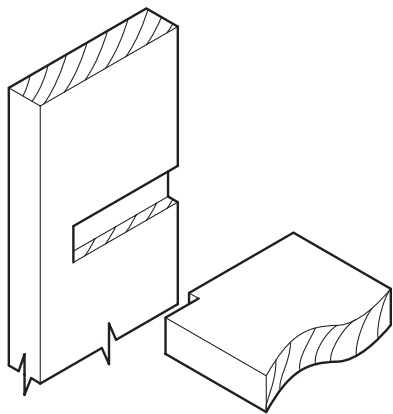
1 Fig. 1 shows four joints which are used in construction. Name each joint.



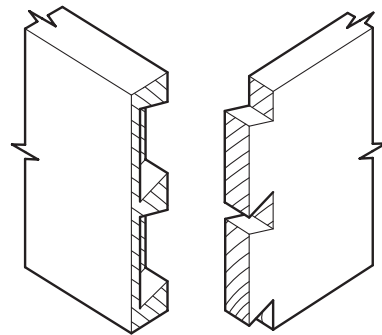
A



B



C



D

Fig. 1

Joint **A**

Joint **B**

Joint **C**

Joint **D** [4]

2 (a) Fig. 2 shows the side view of part of a plane blade.

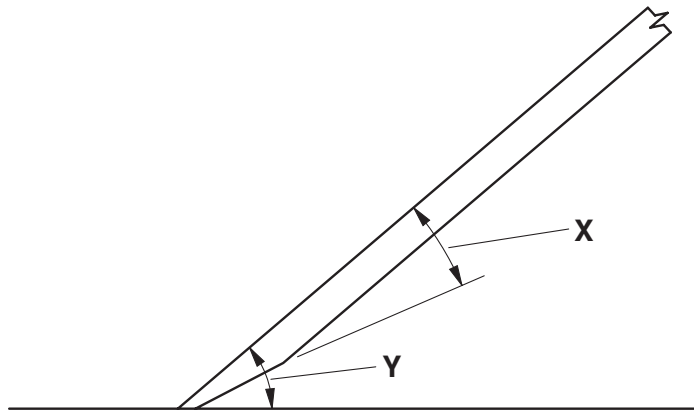


Fig. 2

Name the angle marked X

Name the angle marked Y

(b) (i) Name a plane which can be used for cleaning up work.

.....

(ii) Name a plane which can be used to flatten the edge of a long board.

.....

[4]

3 Name of the fittings shown in Fig. 3.

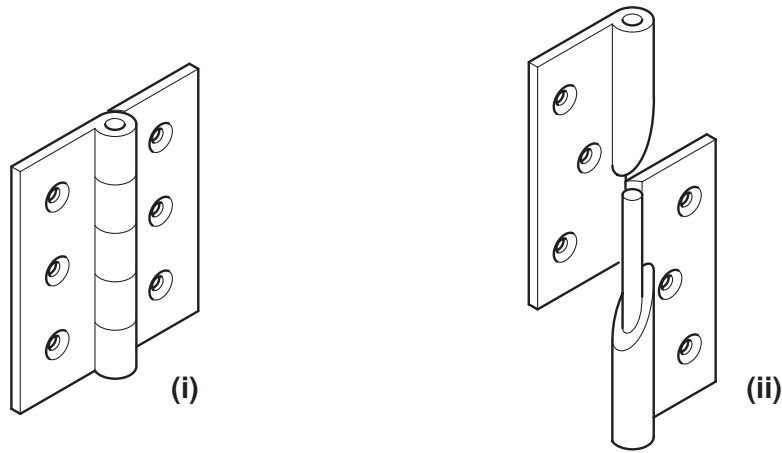


Fig. 3

- (i)
- (ii)

[2]

4 Fig. 4 shows a corner of a piece of manufactured board.

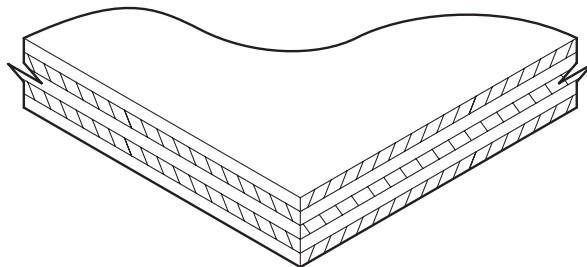


Fig. 4

- (i) Name the board.
.....
- (ii) What name is given to the layers?
.....
- (iii) Briefly describe **two** factors which give the board its strength.
.....
.....

[4]

5 Fig. 5 shows the cross section of a tree.

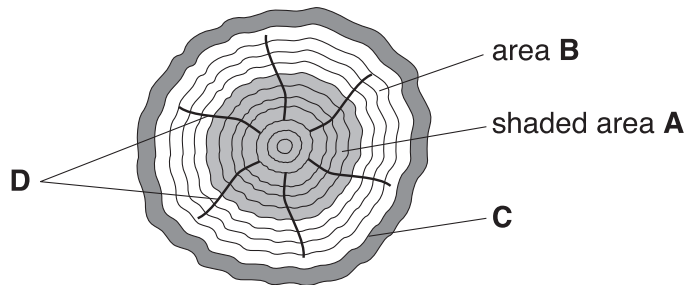


Fig. 5

Name each of the following.

(i) The centre of the tree shaded **A**.

.....

(ii) The outer part of the tree shown **B**.

.....

(iii) The ring under the bark labelled **C**.

.....

(iv) The lines **D** radiating from the centre of the tree towards the bark.

.....

[4]

6 Fig. 6 shows a tool used in woodwork.

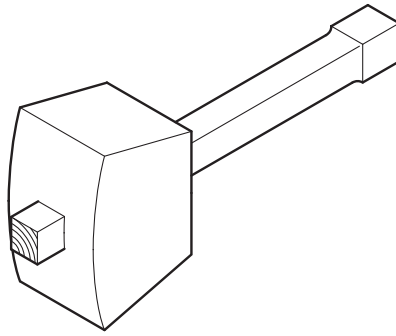


Fig. 6

(i) Name the tool.

.....

(ii) Give a brief description of the use of this tool.

.....

.....

(iii) Name a wood from which the head is made.

.....

(iv) Show on Fig. 6 the correct grain direction on the head of the tool.

[4]

7 Fig. 7 shows a board of wood with three defects.

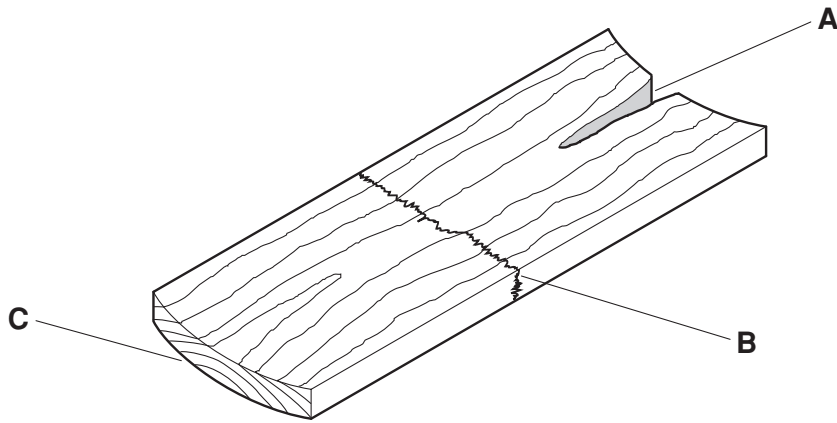


Fig. 7

Name each defect.

A

B

C

[3]

Section I 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.

- 8 When working on a lathe it is necessary to follow certain processes and safety procedures.

Fig. 8 shows a piece of timber which is to be turned into a cylinder.

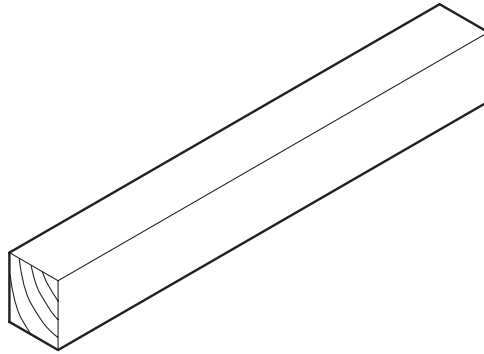


Fig. 8

- (i) Name the process of setting up the piece and turning to a cylinder. [2]
- (ii) Briefly describe, using notes and sketches, how the wood is prepared for turning. [5]
- (iii) Describe the safety checks which you must make before switching on the lathe and starting to turn the work. [5]

- 9 Fig. 9 shows two features cut into wood.

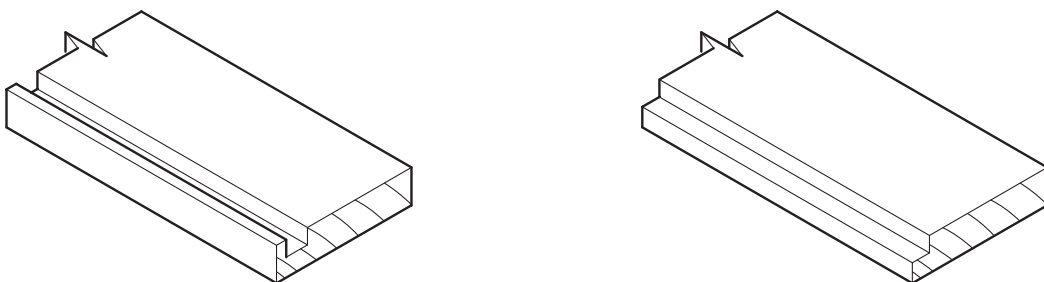


Fig. 9

- (i) Name each feature. [2]
- (ii) Using notes and sketches briefly describe how each feature could be cut using hand tools.
Name each tool and show how each is used and how the wood is held. [2 x 5]

10 Fig. 10 shows a joint used in framework construction.

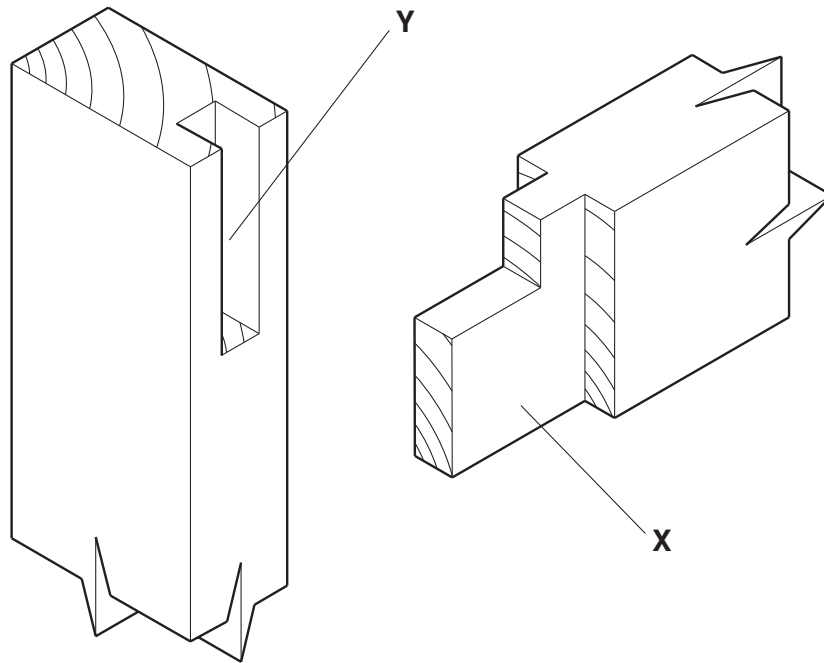


Fig. 10

- (a) Name the joint. [2]
- (b) Use notes and sketches to describe how you would:
- (i) mark out and cut X; [5]
- (ii) mark out and cut Y. [5]

Make sure you name all of the tools used.

11 Fig. 11 shows a hardwood box made in the school workshop.

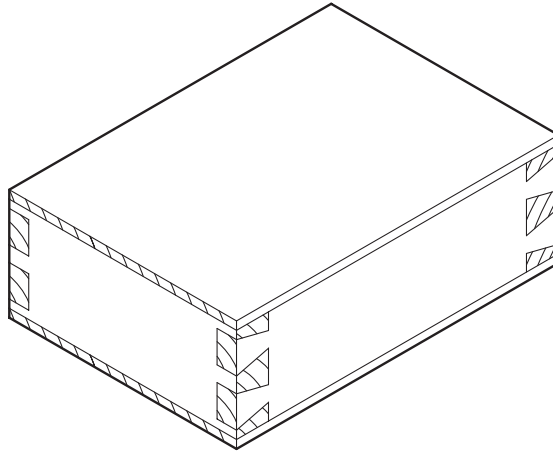


Fig. 11

Explain, using notes and sketches, how you would complete the following finishing processes:

- (i) using an appropriate plane clean up one surface; [4]
- (ii) sand the surface ready to receive a finish; [4]
- (iii) build up a suitable finish. Name the tools and finish used. [4]

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Turn over for Section II

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 a scale of 1 : 5.

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

The drawing on page 13, Fig. 12, shows details of the larger of 2 stacking tables. The underframe is made from solid hardwood. The legs are of section 45×20 . In the upper part of this table there is a drawer. The drawer front is 20 thick. The drawer is of a traditional construction. There is a 20×40 thick cross rail above and below the drawer front, joining the side frames together. The size of the rest of the drawer parts are left to your discretion. There is a back of section 120×20 to conceal the drawer from the other side.

Part C

Sketch freehand and approximately full size:

- (i) an exploded view of the joint you would use to join the cross rail to the leg, at **A**; [8]
- (ii) a design for a handle for the drawer front; [5]
- (iii) any shaping to parts of the framework. [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**, including drawer details; [10]
- (iii) a plan. [3]

(b) Add to your drawing 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]

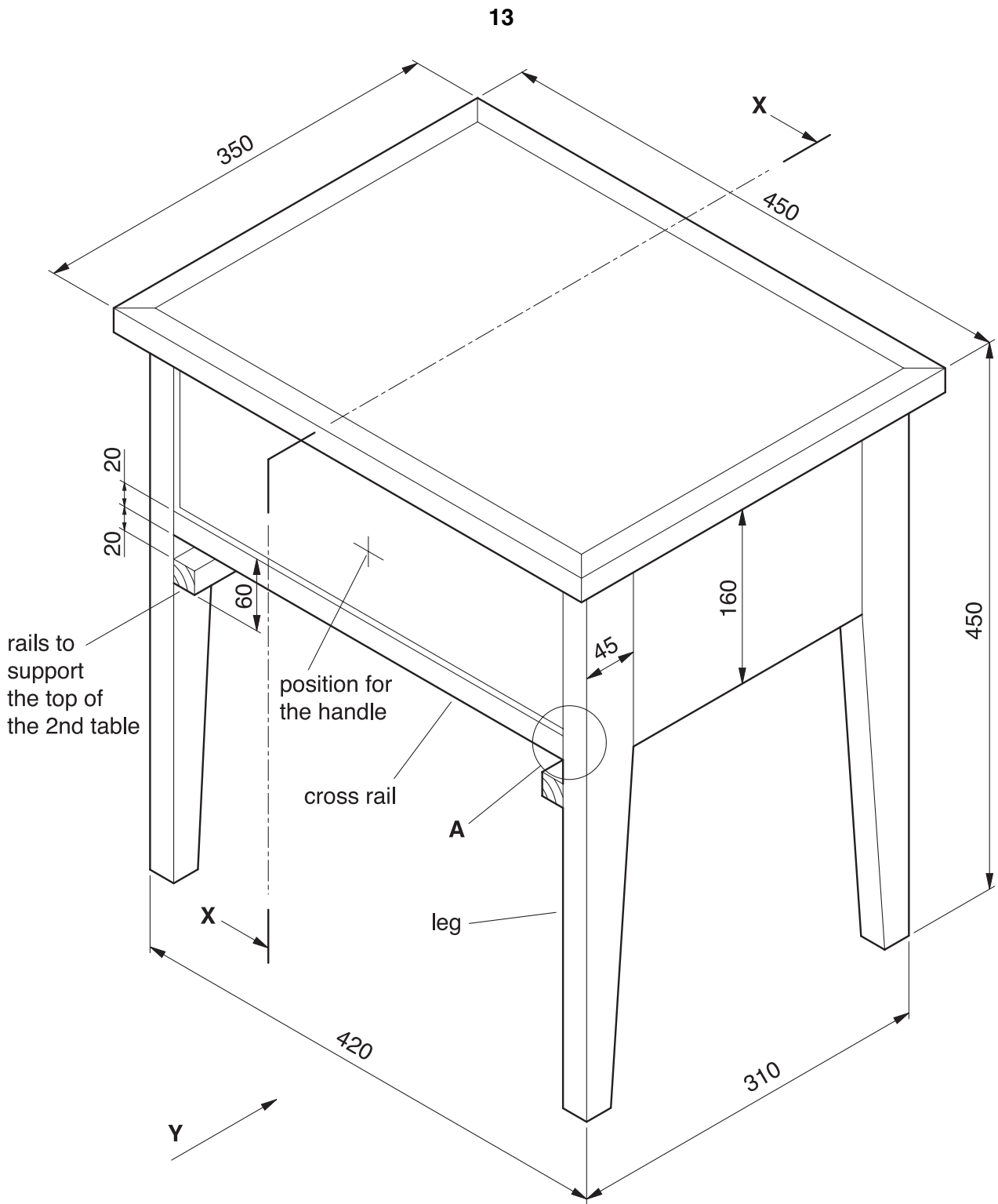


Fig. 12

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