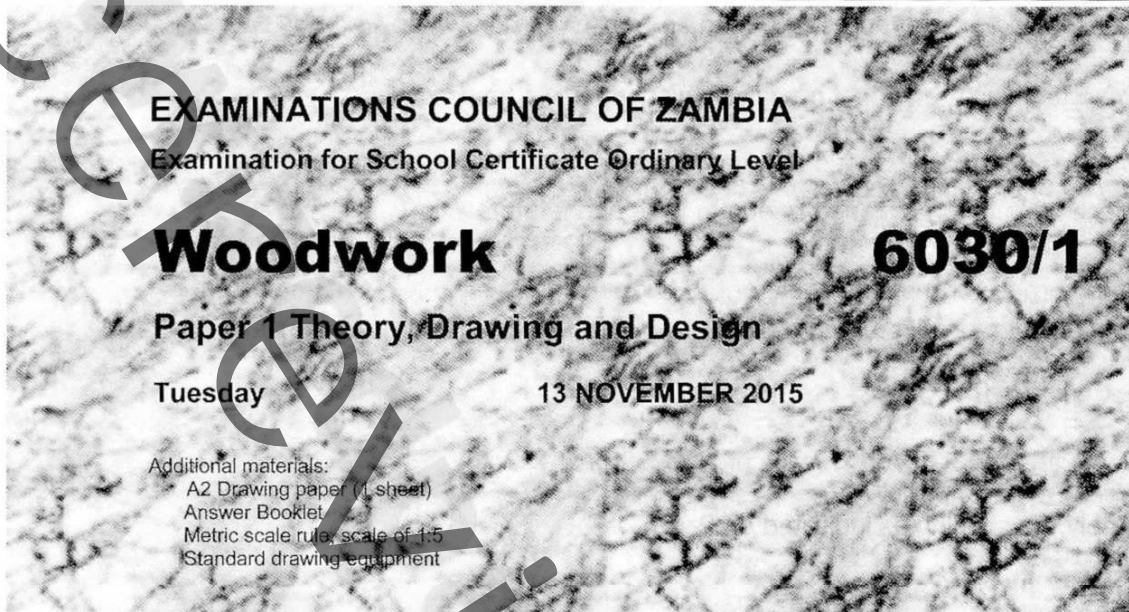


| | |
|---------------|------------------|
| Centre Number | Candidate Number |
| | |

Candidate Name _____



TIME: 2 hours 45 minutes

Marks: 100

Instructions to candidates

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

Section I Part A

Answer **all** parts of question 1.

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

Section I Part B

Answer **any two** questions.

Write your answers on the separate Answer Booklet provided.

Section II Drawing and Design

Answer **all** questions.

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

Use a scale of 1:5 for all your drawings.

At the end of the examination, fasten the separate Answer Booklet and A2 Drawing paper to the question paper.

Information for candidates

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

| FOR EXAMINER'S USE | |
|---------------------|--|
| Section I PART A | |
| 2 | |
| Section I PART B | |
| 3 | |
| 4 | |
| 5 | |
| Section II | |

SECTION I (THEORY) PART A

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

Part A carries 26 marks

You are advised to spend not more than 35 minutes on this section.

- 1 (a) **Table 1** shows the summary of wood glues. Part (i) has been done.
Complete parts (ii) to (vi)

| Type of glue | Application (Cold or hot) | Does it stain wood? (Yes or No) | Water resistance (Low, high, good, fair, bad) |
|-----------------|------------------------------|---------------------------------------|--|
| Animal | Hot | No | Low |
| Casein | (ii) | (iii) | Good |
| Synthetic resin | Cold | (iv) | (v) |
| PVA | (vi) | No | Fair |

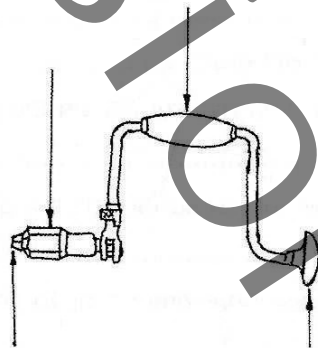
[5]

Table 1

- (b) **Figure 1** shows the drawing of a boring tool..

- (i) Label the indicated parts.
 (ii) Name the tool.....
 (iii) State the use.....

[6]

**Figure 1**

- (c) Green timber is said to be unsuitable for use.

- (i) What is meant by green timber?
 Green timber refers to
- (ii) What term refers to the amount of water in a tree?
 Answer

[2]

(d) A saw can be used to cut either along the grain or across the grain.

(i) What term refers to cutting along the grain?

Answer [2]

(ii) What term does the kerf refer to?

Kerf refers to [2]

(iii) Name the two back saws and state their use.

Name of

1

2

Use of

1

2 [6]

(e) Name the tool you would use to do the following operations.

(i) To clean the housing

.....

(ii) For countersinking in softwood

.....

(iii) To trim the end grain

(iv) To clean the concave surface on the piece of wood.

.....

(v) To clean the convex surface on the piece of wood.

..... [5]

(f) State two safety precautions one needs to observe when using a chisel.

Precaution

1

2 [2]

SECTION I (THEORY) PART B

Answer any two (2) questions from this part. Write your answers in the Answer Booklet.

Part B carries 24 marks. Each question in this part carries 12 marks. You are advised to spend no longer than 35 minutes on this part.

- 2 (a) State
- (i) the three methods of planing end grain safely. [2]
 - (ii) the stages of planing a rough piece of wood to make it smooth. [2]
- (b) Name a plane suitable for planing a rough piece of wood to make it smooth. [2]
- 3 (i) Sketch a try square and label the parts. [4]
- (ii) State four uses of a try square. [4]
- (iii) With the aid of a sketch describe how a try square is tested for accuracy. [4]

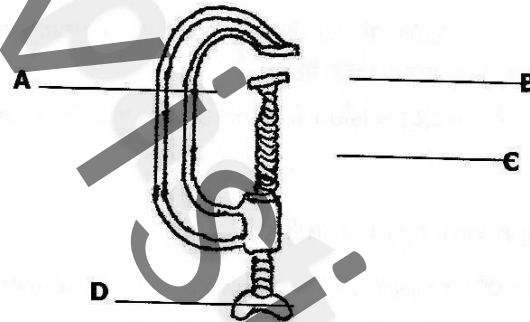


Figure 2

- 4 **Figure 2** shows the drawing of a holding tool.
- (i) Name the tool. [1]
 - (ii) Label the arrowed parts. [4]
 - (iii) State **two** uses. [2]
 - (iv) State the material from which the parts labelled **A** and **C** are made from. [2]
 - (v) Why is part B designed to swivel or turn round? [1]
 - (vi) By use of a sketch, show how one would prevent the work from being damaged by the tool. [2]
- 5 (i) What is the purpose of glass paper? [2]
- (ii) What is it made of? [2]
- (iii) Why should joints not be glass papered? [2]
- (iv) Write **two** reasons as to why it is advisable to use a cork rubber or piece of wood when glass papering. [2]
- (v) State the information one needs to provide the shopkeeper when buying glass paper. [4]

SECTION II DRAWING AND DESIGN.

Answer all questions from this section on the already prepared drawing paper.

Section II carries 50 marks

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

On your drawing paper, use the space to the right of the vertical line to answer Part C (Design) and the space to the left to answer Part D. (Drawing)

The drawing in **Figure 3** shows an occasional table. The table has a drawer to be used for storage of small accessories. The legs are made of solid timber 50mm square. The back and side rails are also made of solid timber of 180mm × 20mm thick. The back is joined to the frame in such a way that it is flush with hind legs.

The top drawer front, drawer sides and drawer back are made of solid wood of 20mm thick. The front has two provisions for compartments for storing some small items on both sides of the drawer. The top rails and portions are made of pieces of solid wood of 40mm × 30mm. The bottom of the drawer is made of plywood grooved in.

The drawer construction is traditional. All dimensions not shown, including that of traditional drawer construction are left to your discretion.

Do not show the solution to the provision for compartments in your solution.

Part C

Sketch freehand and approximately half full size:

- (i) an exploded view of the joint you would use to join the top front rail to the leg. [5]
- (ii) a design of the drawer handle method of fixing to the drawer front. [4]

Part D

- (a) Draw in either first or third angle projection using a scale of 1:5.
 - (i) a front view in the direction of arrow F. [10]
 - (ii) a sectional end view on line X-X. [17]
 - (iii) a plan view. [2]

[Hidden detail is not required in any view]
- (b) Add **six** main dimensions to your drawing. [3]
- (c) In the title block, drawn at the bottom right hand corner of your drawing, Print the following details in suitable lettering.
 - (i) Your name
 - (ii) Your Examination Number
 - (iii) A title
 - (iv) The projection you have used
 - (v) The scale used [5]

[2]

[2]

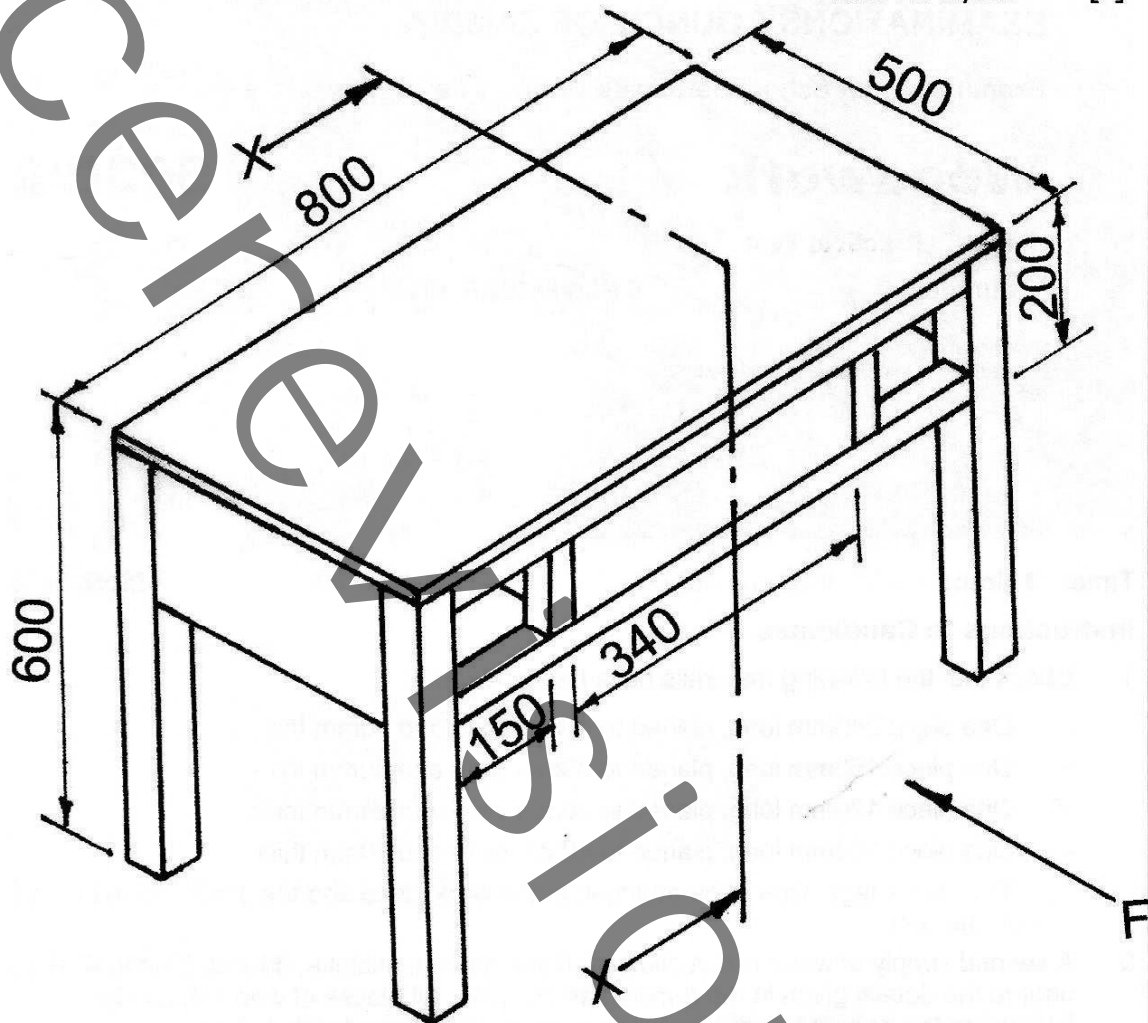


FIGURE 3