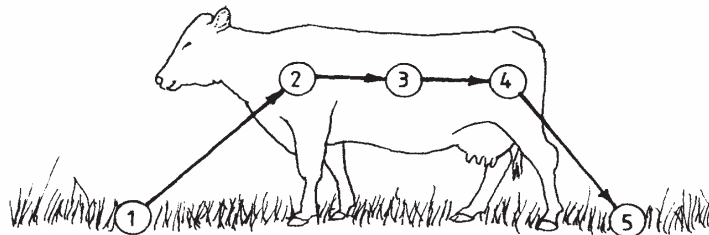


- (a) Name the parts labelled **G, H, J** and **K**. (2 marks)
- (b) State the functions of the parts labelled **G, J** and **K** in the cooling system. (3 marks)

- 28 The diagram below illustrates the stages of life cycle of a tick. Study the diagram and answer the questions that follow.



- (a) Describe the development of ticks at **1, 2, 3** and **4**. (4 marks)
- (b) Classify the tick on the basis of the life cycle. ( $\frac{1}{2}$  mark)

### SECTION C (40 marks)

*Answer any TWO questions in this section in the spaces provided at the end of the section.*

- 29 (a) Describe the use of various hand tools required for the construction of a wooden rabbit hutch. (10 marks)
- (b) What factors should a farmer consider when selecting materials for constructing a dairy cattle shed. (10 marks)
- 30 (a) Describe the feeding practices carried out on a calf from birth to weaning. (10 marks)
- (b) Describe management practices that would ensure clean milk production in a dairy farm. (10 marks)
- 31 (a) Describe how the following tractor components are used to attach implements to the tractor:
- (i) Three (3) point linkage/hitch. (6 marks)
- (ii) Power Take Off shaft (P.T.O) (4 marks)
- (b) Describe how the ignition system of a tractor petrol engine works. (10 marks)

**29.15 WOODWORK (444)**

**29.15.1 Woodwork Paper 1 (444/1)**

444/1

**WOODWORK**

**Paper 1**

**Oct./Nov. 2008**

2½ hours

**THE KENYA NATIONAL EXAMINATIONS COUNCIL**

**Kenya Certificate of Secondary Education**

**WOODWORK**

**Paper 1**

2½ hours

**INSTRUCTIONS TO CANDIDATES**

*Candidates should have the following for this examination:*

*Answer booklet*

*Drawing instruments*

*Drawing paper size A3.*

*This paper has **TWO** sections; **A** and **B**.*

*Answer **ALL** the questions in section **A**. From section **B**, answer question **11** and any other **THREE** questions.*

*All dimensions are in millimetres unless otherwise stated.*

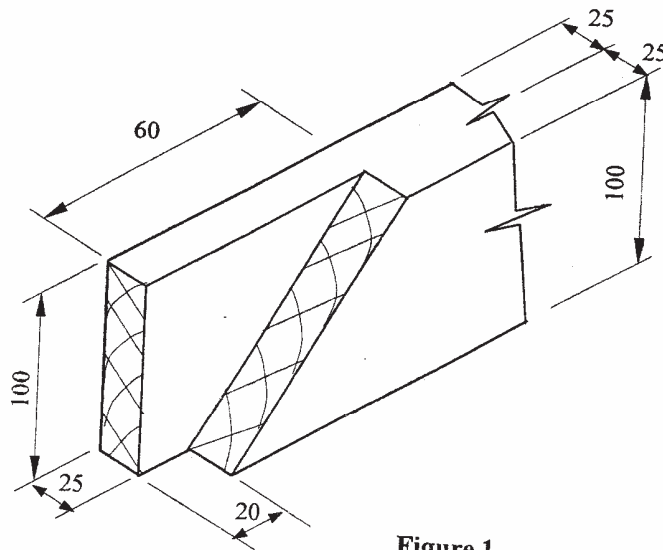
**This paper consists of 7 printed pages.**

**Candidates should check the question paper to ascertain that all the pages are printed as indicated and no questions are missing.**

**SECTION A: (40 marks)**

*Answer ALL the questions in this section.*

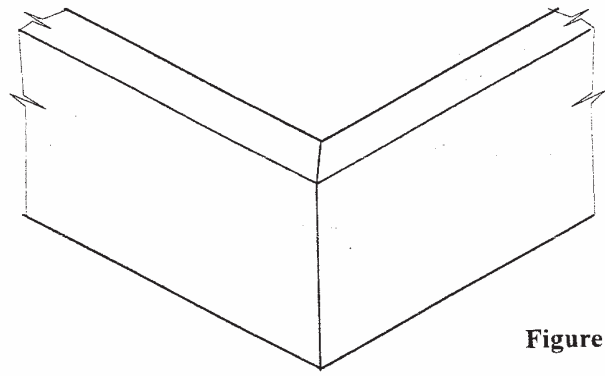
- 1 Outline the procedure for treating a minor cut on the body. (2 marks)
- 2 (a) State **six** factors that may hinder the growth of trees. (3 marks)  
(b) Calculate the wet weight of a piece of timber given that:  
dry weight = 40g  
moisture content = 32% (2 marks)
- 3 **Figure 1** shows a piece of timber to be marked and cut as shown:



**Figure 1**

- (a) List the tools required for marking and cutting the piece of timber. (2 marks)
- (b) Outline the procedure of marking and cutting the piece of timber. (3 marks)
- 4 State **two** classifications of planes and give **two** examples of each. (3 marks)
- 5 (a) Explain the term countersinking. (2 marks)  
(b) Sketch a counter sunk screw in position. (2 marks)
- 6 With the aid of a labelled sketch, explain how a metal scraper is used. (4 marks)

7 **Figure 2** shows a mitred butt joint.



**Figure 2**

With the aid of sketches, explain **three** methods of reinforcing the joint. (6 marks)

8 With the aid of sketches, differentiate between the following types of matching veneers:

- (a) book and slip;
- (b) diamond and reverse.

(2 marks)

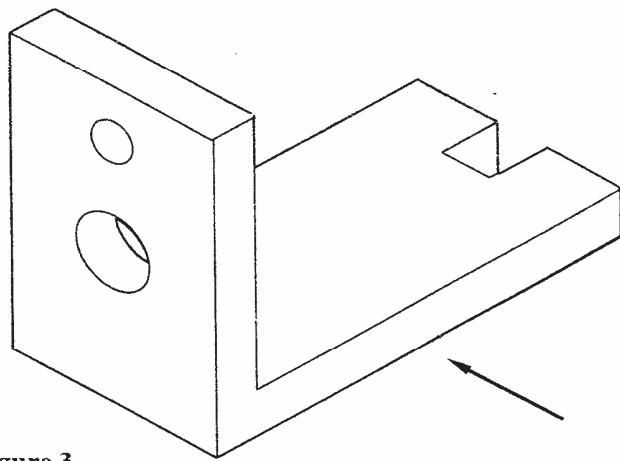
9 (a) State **six** factors that affect marketing of 'Jua Kali' products in Kenya.

(3 marks)

(b) State **two** indicators of bluntness in saws.

(1 mark)

10 **Figure 3** shows a pictorial view of a metal clamp.



**Figure 3**

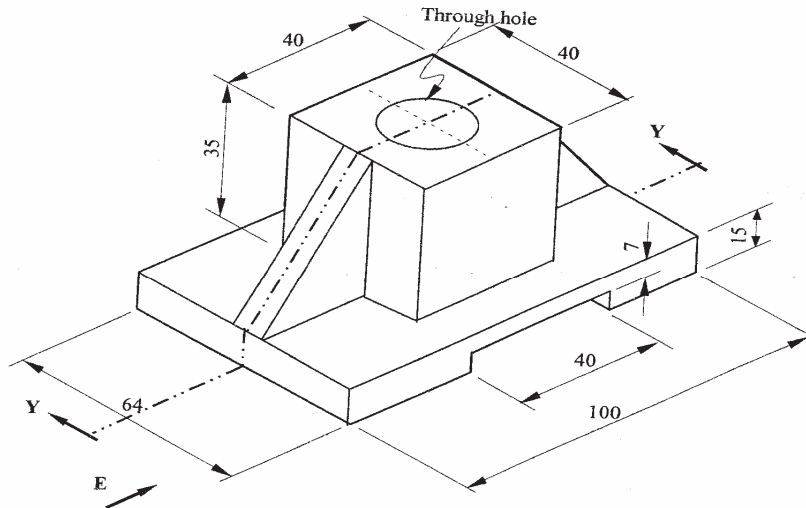
Sketch the three views of the block in 1<sup>st</sup> angle projection.

(5 marks)

**SECTION B (60 marks)**

Answer question 11 and any other **three** questions from this section. Candidates are advised to spend **not more than 25 minutes** on question 11.

- 11 **Figure 4** shows an isometric view of a block in 1<sup>st</sup> angle projection.



**Figure 4**

Draw full size and indicate the major dimensions:

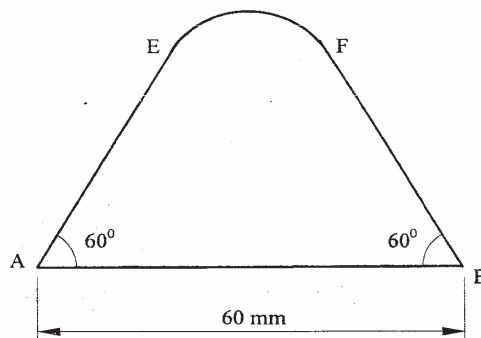
- (a) Sectional front elevation (y-y).
- (b) End elevation in the direction of arrow E.
- (c) Plan.

(15 marks)

- 12 (a) Outline the procedure of planing sawn timber to a given size using hand tools.

(4 marks)

- (b) **Figure 5** shows an irregular hole.

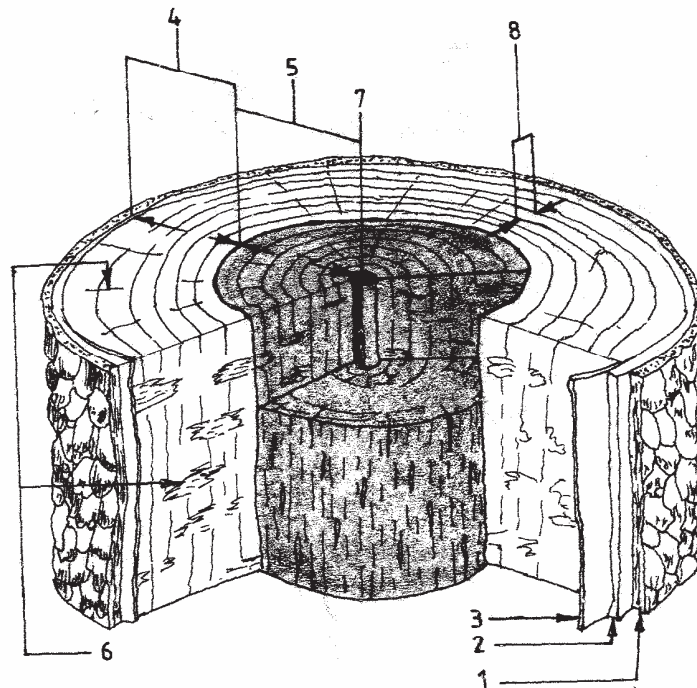


**Figure 5**

Illustrate the procedure of marking out the hole using a pair of compasses and a ruler.

(11 marks)

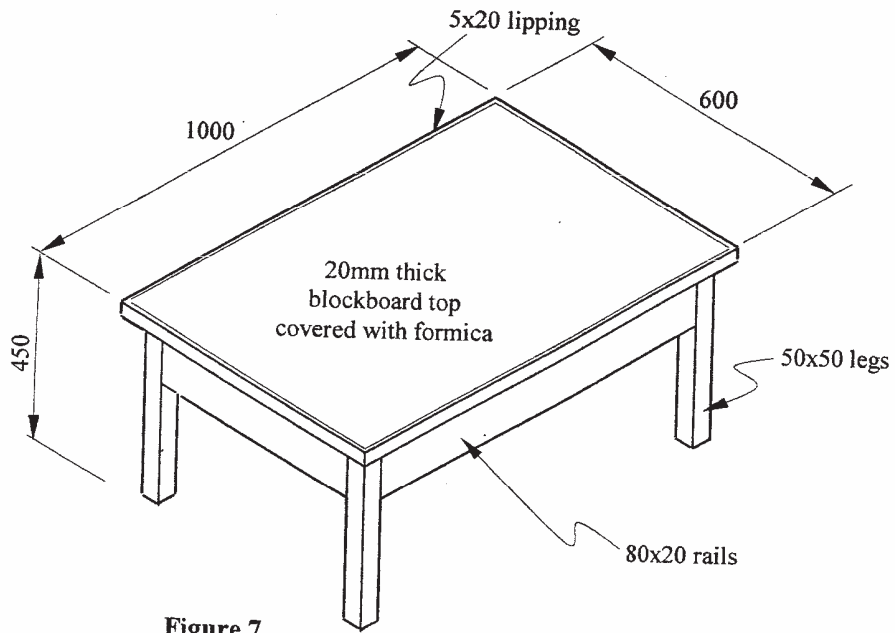
- 13 (a) Outline the procedure of applying linseed oil to a smooth and clean wooden surface. (5 marks)
- (b) **Figure 6** shows a section of a tree trunk.



**Figure 6**

- (i) Name the parts labelled 1 to 8. (4 marks)
- (ii) State the function of each of the parts labelled 1 to 6. (6 marks)
- 14 (a) Sketch and label the parts of a compass saw. (2½ marks)
- (b) Classify the following types of saws as either hand, backed, framed or narrow blade and state one function of each.
- |                     |                  |
|---------------------|------------------|
| (i) Bow saw         | (v) Tenon saw    |
| (ii) Dovetail saw   | (vi) Pad saw     |
| (iii) Cross-cut saw | (vii) Coping saw |
| (iv) Compass saw    | (viii) Rip saw   |
- (8 marks)
- (c) Explain **three** methods of decorating wooden articles by shaping. (4½ marks)

15 (a) **Figure 7** shows a coffee table.

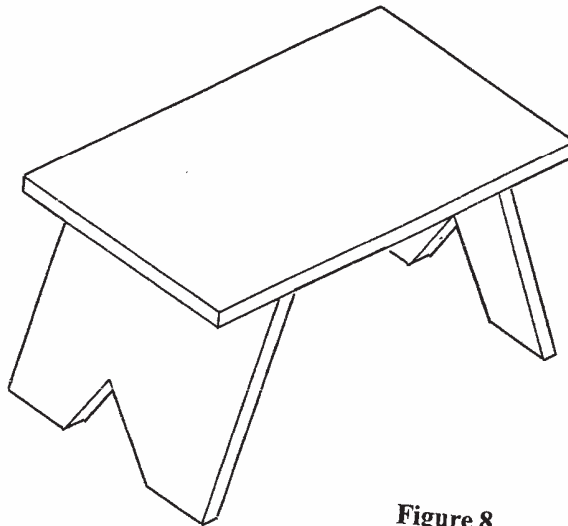


**Figure 7**

Make a cutting list of all the materials required.

(11 marks)

(b) **Figure 8** shows a small stool which is to be made as a workshop project.



**Figure 8**

Outline the **four** important parts of the work plan for the project.

(4 marks)