

Name: ..... Index No. .....

School: ..... Date: ..... Candidate's Sign .....

**444/1**

**WOODWORK**

**PAPER 1**

**MARCH / APRIL – 2013**

**FORM FOUR**

**TIME: 2½ HOURS**

## **BARINGO NORTH TRIAL EXAMINATIONS - 2013**

**Kenya Certificate of Secondary Education (K.C.S.E)**

### **INSTRUCTIONS TO CANDIDATES**

1. Write your name and index number in the answer sheets provided.
2. Candidates should have the following for this examination.

Drawing instruments

Drawing paper size A<sub>3</sub>

3. This paper has two sections A and B
4. Answer all the questions in section A and from B answer question 11 on A<sub>3</sub> paper provided and any other three questions from section B.
5. Candidates should check the question paper to ascertain that all the pages are printed and no question is missing.

*This paper consists of 9 printed pages.*

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

## **SECTION A (40MARKS)**

1. a) State **four** safety measures to be observed while using hand tools in a workshop. (2marks)

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- b) List **two** benefits of learning woodwork. (1mark)

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2. Explain the major difference between a tenon saw and dovetail saw. (4marks)

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- a) Sketch and label pictorial view of a mortise gauge (5marks)

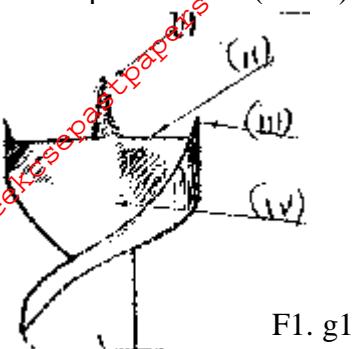
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- b) List the steps required to prepare a piece of timber 500 x 50 x 25mm to 450 x 45 x 20mm. (6marks)

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4. Name the bit shown below and the parts labeled (I – IV)

(2½ marks)



5. Why is it that edge moldings is often added to the edges of table tops? (1½ marks)

6. Give a solvent for each of the following finishes. (2marks)

i) Wax polish

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ii) Shellac polish

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iii) Gloss paints

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iv) Cellulose lacquers

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7. Name **four** uses of a steel rule. (2marks)

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8. Show a constructional details of a plywood.

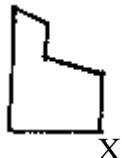
(4marks)

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9. Describe the circumstances under which a cutting gauge may be used. (5marks)

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10. Fig 2 shows a wooden block drawn in first angle orthographic projection. Sketch an isometric view of the block making X the lowest point. (5marks)



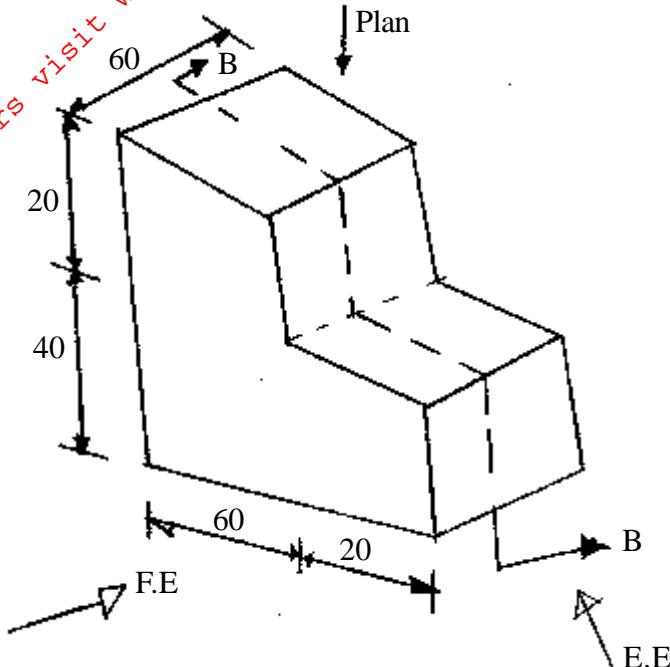
F1.g2

**SECTION B: (60MARKS)**

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

11. Figure 3 shows a pictorial view of a shaped block. On the A<sub>3</sub> paper provided draw a full scale the following views in first angle orthographic projection.  
(15marks)
- Sectional elevation B-B
  - Plan
  - End elevation

*NB: Include six leading dimensions.*



12. a) State where each of the following tools may be used. (2marks)

i) Tenon saw

.....

ii) Fret saw

.....

iii) Mortise Gauge

.....

iv) Cutting Gauge

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- b) With the aid of sketches, show the difference between (6marks)

i) Countersunk screw and coach screw

ii) Cross pein hammer and ball pein hammer

iii) Gimlet tool and bradawl

c) With the help of neat sketches describe the procedure of making tee halving joint naming all the necessary tools. (7marks)

13. a) Name **two** advantages of polyvinyl acetate. (2marks)
- .....  
.....
- b) Give **three** uses of a steel tape. (1½ marks)
- .....  
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.....
- c) State the functional difference between hand drill and Ratchet Brace. (½ mark)
- .....  
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- d) Describe with well labeled sketches the procedure of fixing mitred frames using mitre Gramps. (11 marks)

14. a) Give **three** main functions of pigments in paints (1½ marks)
- .....  
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- b) What is the importance of the following when assembling work. (1½ marks)
- i) Winding strip

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- ii) Tooothing work top

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- iii) Sash clamp

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- c) Sketch each of the following joints giving their specific uses. (10marks)

i) Butt joint

ii) Edge spline

iii) Edge dowelled

iv) Splayed joint

v) Through housing joint.

d) Using sketches differentiate between vertical and horizontal paring. (2marks)

15. a) State **four** requirement necessary for self-employment in wood industry. (2marks)

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b) List **four** methods of forming curves in timber (2marks)

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c) State **four** factors which are considered in the selection of timber when designing a project (2marks)

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d) Show **three** methods of edge moulding manufactured boards using different materials.

(9marks)