

Name .....

Index Number .....

School .....

Candidate's Signature .....

444/1

Date .....

**WOODWORK**

**Paper 1**

**2015**

2½ hours

**MAKUENI COUNTY KCSE 2015 PREPARATORY EXAMINATION**

**Kenya Certificate of Secondary Education**

**WOODWORK**

**Paper 1**

2½ hours

**Instructions to candidates**

- (a) Write your name and index number in the spaces provided.
- (b) Sign and write the date of the examination in the spaces provided.
- (c) Candidates should have the following materials for this examination:
  - (i) Drawing instruments.
  - (ii) Drawing paper size A3.
- (d) This paper consists of two sections; **A** and **B**.
- (e) Answer all questions in section A in the spaces provided. From section B, answer question 11 on A3 paper provided and any other three questions in the spaces provided.
- (f) All dimensions are in millimetres unless otherwise stated.
- (g) Candidates should answer the questions in English.

*Sponsored by H.E. Prof. Kivutha Kibwana, Governor, Makueni County.*

TURN OVER

**SECTION A (40 marks)**

1. (a) State three objectives of performing first aid on a person who has had a cut in the workshop. (1 ½ marks)

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- (b) State four reasons for using bandages on an injured person. (2 marks)

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2. (a) State four physical properties that could be stated when ordering for nails. (2 marks)

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- (b) Explain the effects of using oversize and undersize screw drivers when driving screws. (2 marks)

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3. Briefly describe how to test:

(a) A carcass for squareness using a straight edge.

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(b) A try square for accuracy.

(4 marks)

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4. (a) State two factors used to determine the coarseness of saw teeth.

(2 marks)

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(b) Give two advantages and disadvantages of back sawing in timber conversion. (2 marks)

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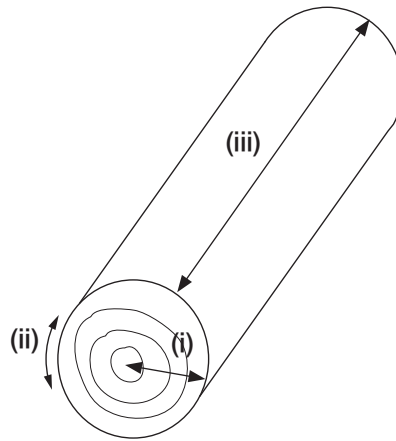
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5. (a) The figure below is of a log. State the types of shrinkages and briefly explain each of them. (3 marks)



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(b) State six benefits of starting a small-scale business in rural areas. (6 marks)

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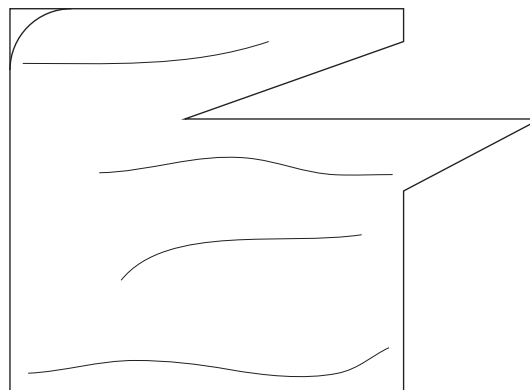
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6. (a) The figure below is of an arc made on a piece of timber. With the aid of a sketch, explain briefly how it is marked. (3 marks)



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(b) Describe the following terms as used in timber: (4 marks)

(i) Texture.

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(ii) Figure.

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7. (a) State three general rules to be observed when sharpening bits. (1 ½ marks)

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(b) State two indicators of bluntness in saws. (2 marks)

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8. Using a labelled sketch, give the meaning of a saw kerf. (1 ½ marks)

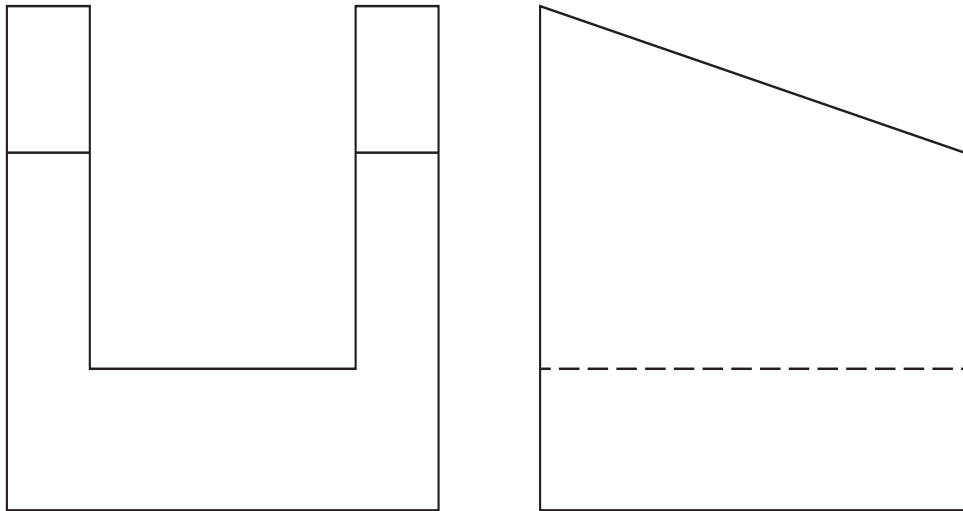
9. Illustrate the cutting action of the following saws:

(2 marks)

(a) Ripsaw

(b) Cross-cut saw

10. Given below are two views of a block in first angle orthographic projection. Show the missing plan. (1 ½ marks)







(b) State four purposes of a primer coat as used in painting.

(4 marks)

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(c) Using labelled sketches, show the difference between block board and plywood.

(6 marks)

13. (a) Briefly explain in point form why carpenters fail after starting their own businesses (workshops). (6 marks)

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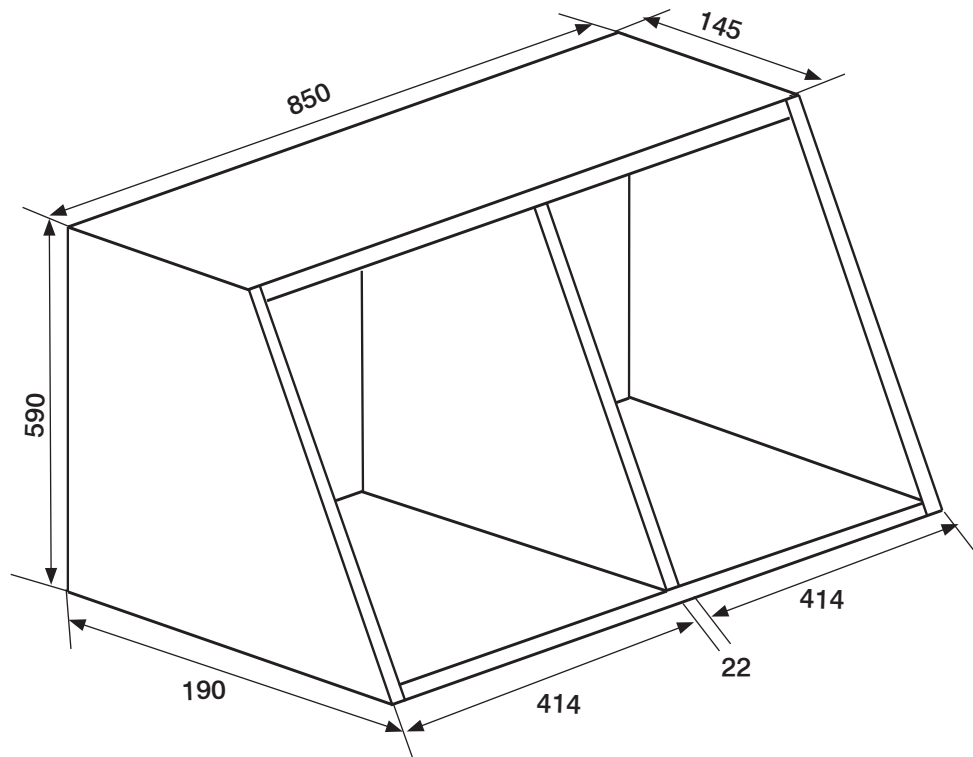
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(b) Figure 4 shows pictorial views of a wall mounted shelf. All members are 22 mm thick softwood.



Prepare a cutting list for purchasing timber for the shelf.

(9 marks)

14. (a) Outline the procedure of painting a new wood surface.

(4 ½ marks)

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(b) Using labelled sketches, show three methods of fixing a table top to a rail. (10 ½ marks)

15. (a) Name and explain the steps followed in the manufacture of hardboard.  
(10 marks)

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(b) Specification on a wood screw packet is given as csk steel G 10 × 38. Explain the specification detail. (4 marks)

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(c) State the solvents for the following finishes: (1 mark)

(i) Shellac.

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(ii) Water-based paint.

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(iii) Oil paint.

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