

3.16 WOODWORK (444)

3.16.1 Woodwork Paper 1 (444/1)

SECTION A (40 marks)

Answer **all** the questions in this section in the spaces provided.

- (a) State **two** reasons for providing a hand tool store in a wood workshop. (2 marks)

(b) List **four** timber products that are manufactured by small scale industries in Kenya. (2 marks)
- State **four** safety rules applicable to cutting tools. (4 marks)
- Sketch and label a marking gauge. (4 marks)
- Figure 1** shows a bow saw. (1 mark)

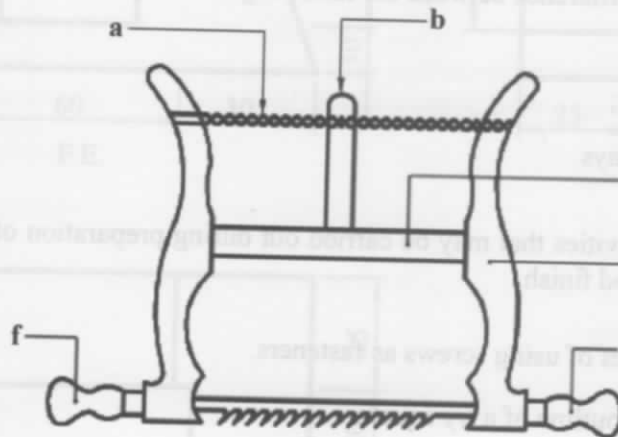


Figure 1

- Name the parts labelled a, b, c, d, e and f. (3 marks)
- Outline **four** measures to be taken to ensure efficient planning when using a bench plane. (4 marks)
  - State **four** advantages of artificial seasoning. (4 marks)

7. Figure 2 shows a hand tool.

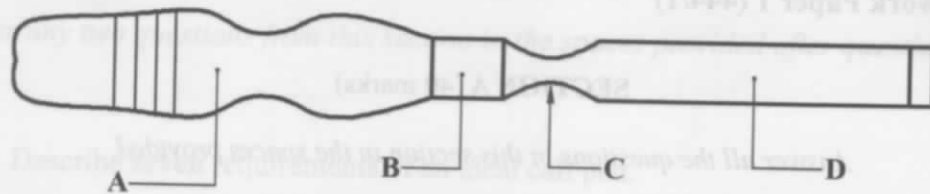


Figure 2

- (a) Name the tool. ....
- (b) Name the parts labelled A, B, C and D. ....
- (c) State the use of the tool. .... (3 marks)
8. (a) Explain the difference between the following terms as used in woodwork decorative works. (3 marks)
- (i) Inlays;
- (ii) Overlays.
- (b) List **four** activities that may be carried out during preparation of an old wood surface to receive a wood finish. (2 marks)
9. State **four** advantages of using screws as fasteners. (4 marks)
10. Figure 3 shows the outline of a try square.

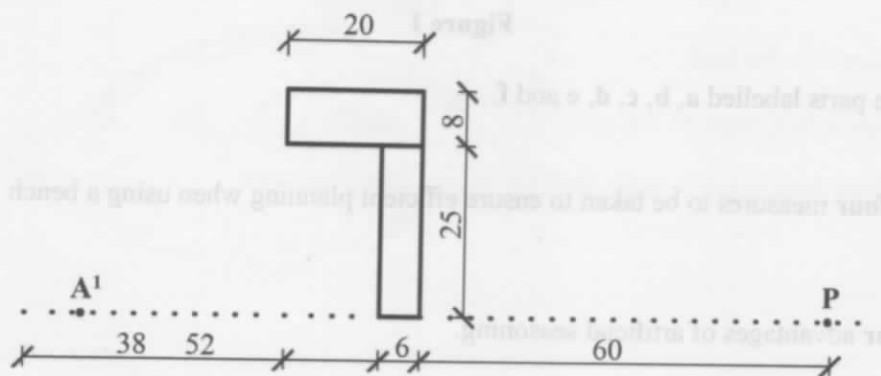


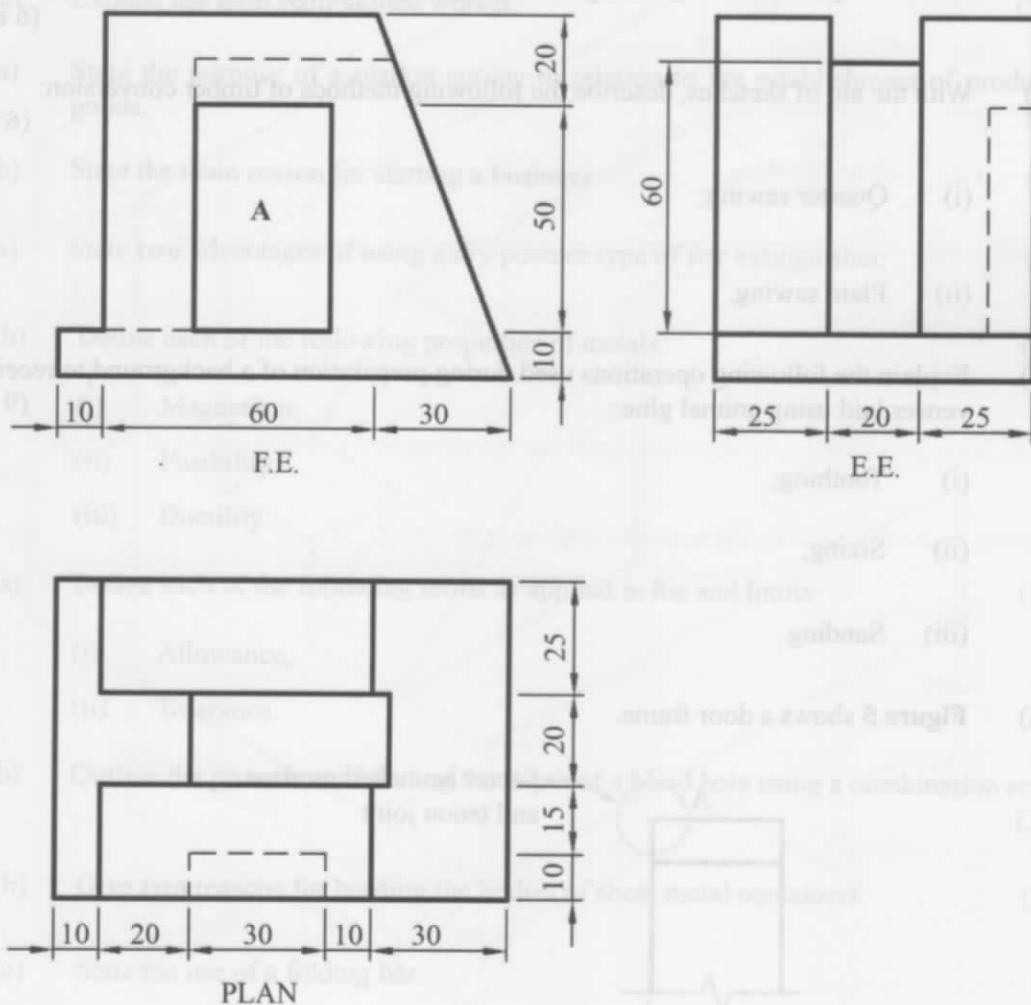
Figure 3

Using point P as the pole, draw a similar figure enlarged in size with A located at point A'.

(5 marks)

Answer question 11 on the A3 paper provided and any other **three** questions from this section in the spaces provided. Candidates are advised **not to spend more than 25 minutes on question 11.**

11. **Figure 4** shows three views of a block drawn in first angle orthographic projection. Draw the block **Full Size** in oblique cabinet projection with face A parallel to the plane of projection. Indicate six major dimensions. (15 marks)



**Figure 4**

12. (a) Distinguish between bleaching and staining as used in finishing of wood surfaces. (4 marks)
- (b) With the aid of a labelled sketch, outline the procedure of measuring and marking out a corner halving joint. (11 marks)

13. (a) Explain the following terms as applied in design: (4 marks)

(i) Line;

(ii) Colour.

(b) Outline the procedure of adjusting an expansive bit. (5 marks)

(c) Outline the procedure of grinding the cutting blade of a smoothing plane using a grinder. (6 marks)

14. (a) With the aid of sketches, describe the following methods of timber conversion: (6 marks)

(i) Quarter sawing;

(ii) Plain sawing.

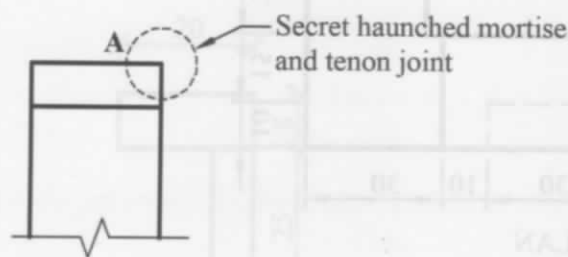
(b) Explain the following operations used during preparation of a background to receive a veneer laid using animal glue: (9 marks)

(i) Tothing;

(ii) Sizing;

(iii) Sanding.

15. (a) **Figure 5** shows a door frame.



**Figure 5**

Sketch an exploded view of the joint labelled A. (6 marks)

(b) With the aid of sketches, show **two** methods of fastening two pieces of timber using wire nails. (4 marks)

(c) (i) Explain the term setting as applied in maintenance of saws. (1 mark)

(ii) Outline the procedure of setting a hand saw. (4 marks)