

29.16 WOODWORK (444)

29.16.1 Woodwork Paper 1 (444/1)



MANYAM FRANCHISE
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SECTION A (40 marks)

Answer all the questions in this section.

- 1 Outline the basic first aid that should be administered to a victim of a cut on the wrist. (1½ marks)
- 2 Outline the process through which a tree manufactures its food. (4 marks)
- 3 (i) Name each of the tools shown in Figure 1.

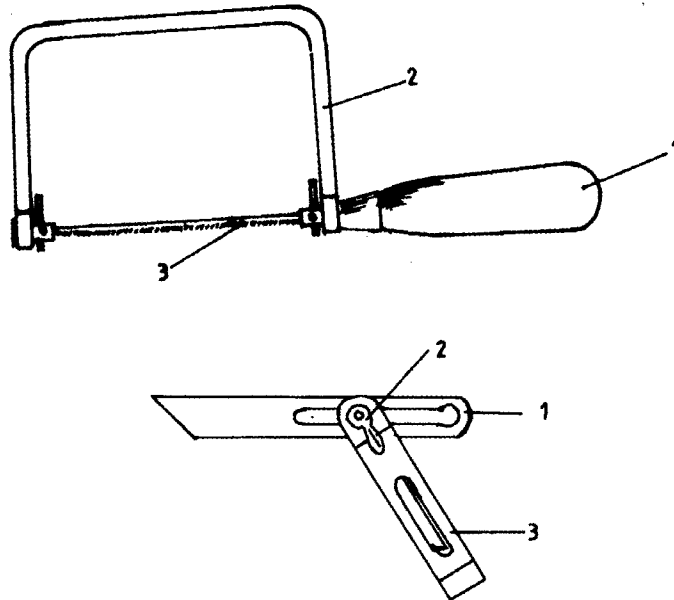


Figure 1

- (ii) Name the parts labelled 1, 2 and 3 for each tool.
 - (iii) State the use of each tool. (5 marks)
- 4 With the aid of labelled sketches, explain the difference between a backsaw and a hand saw. (5 marks)
 - 5 Figure 2 shows a component of a jackplane.

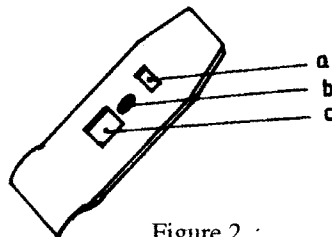


Figure 2

- (i) Name the component. (1 mark)
 - (ii) Name the areas labelled a, b and c. (1½ marks)
 - (iii) State **two** functions of the component. (2 marks)
- 6 (a) Distinguish between shelf life and storage life of glue. (2 marks)
- (b) Sketch and label an oval head screw. (2 marks)
- 7 Figure 3 shows the corner of a work piece with a curve. (3 marks)

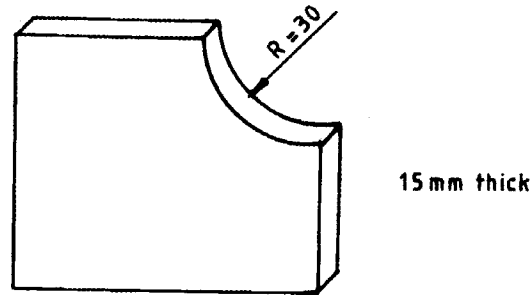


Figure 3

Outline the procedure of shaping the curve using hand tools.

- 8 (a) State **three** reasons for placing a piece of wood under a claw hammer when drawing out nails. (3 marks)
- (b) Distinguish between the following terms as used in wood finishes:
- (i) staining;
 - (ii) bleaching. (2 marks)
- 9 Name **four** institutions in Kenya that deal with afforestation. (2 marks)
- 10 Figure 4 shows a pictorial view of a wooden coat hook. (2 marks)

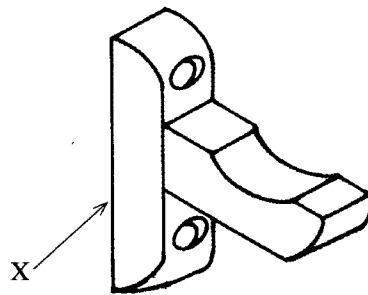


Figure 4

Sketch the three views of the wooden coat hook in third angle projection. View front elevation from the direction of arrow X.

(6 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 5 shows three views of a block drawn in first angle orthographic projection.

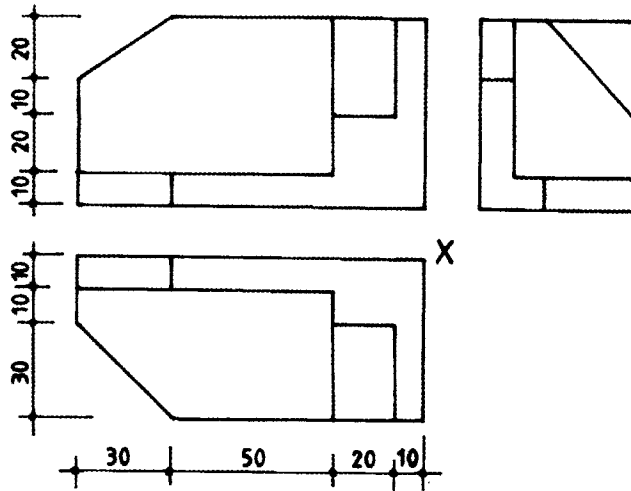


Figure 5

Draw full size, an isometric view of the block, taking X as the highest point and insert eight dimensions. (15 marks)

- 12 (a) State six disadvantages of using unseasoned timber. (3 marks)
- (b) With the aid of labelled sketches, differentiate between the following centre bits: (6 marks)
- plain bit;
 - screw nosed bit.
- (c) State six operational rules to be observed when using a hand drill. (6 marks)
- 13 (a) State six causes of splitting timber when nailing. (6 marks)
- (b) Outline the procedure of fixing veneer on a table top using contact glue. (9 marks)
- 14 (a) Sketch and label an exploded view of a corner single dovetail joint. (4 marks)
- (b) Outline the procedure of constructing the joint named in 14(a). (11 marks)
- 15 (a) A piece of timber weighs 100g. After drying it in an oven its weight dropped by 10%. Determine the moisture content of the dried timber. (3 marks)
- (b) (i) Distinguish between primary and secondary colours. (4 marks)
- (ii) State **two** examples for each.
- (c) Explain each of the following processes as used in the maintenance of saws. (8 marks)
- jointing;
 - shaping;
 - setting;
 - sharpening.