

4.2 WOODWORK (444)

4.2.1 Woodwork Paper 1 (444/1)

SECTION A (40 marks)

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

1. (a) Define the term “entrepreneurship”. (2 marks)
- (b) List **four** institutions from which one can get capital to start a small workshop. (2 marks)
2. Using sketches, show the difference between a marking gauge and a cutting gauge. (4 marks)
3. State **two** advantages of studying woodwork. (2 marks)
4. Using sketches show **two** faults that occur as a result of incorrectly fixing butt hinges. (4 marks)
5. (a) Distinguish between rounding and carving as used in shaping wood. (3 marks)
- (b) Name **two** hand tools used for each of the processes in 5(a). (2 marks)
6. With the aid of sketches, show the difference between an “end split” and a “check” on a timber board. (4 marks)
7. (a) **Figure 1** shows a stopped groove for a housing joint.

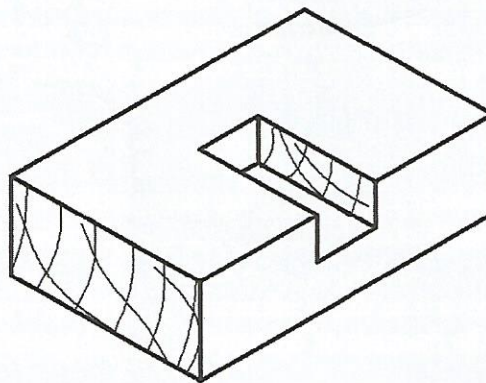


Figure 1

List **four** tools used to make the groove. (2 marks)

(b) Outline **two** features that differentiate a try plane from a smoothing plane. (2 marks)

8. (a) Give **two** reasons that may cause a hand saw to get stuck in a kerf while in use. (2 marks)
- (b) Outline the procedure of cutting the work piece marked as shown in **Figure 2** using a hand saw. (3 marks)

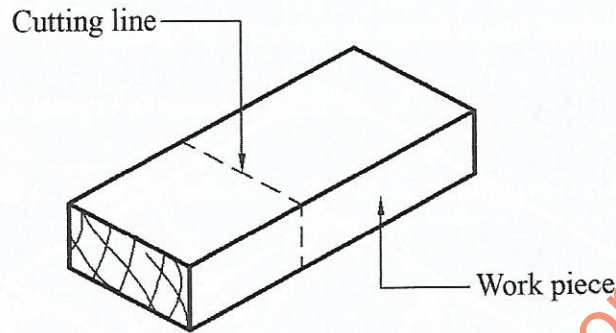


Figure 2

9. (a) State **two** reasons that may make a try square inaccurate. (2 marks)
- (b) List **four** safety precautions to observe when using a circular saw. (2 marks)
10. **Figure 3** shows a regular hexagon of sides 20 mm. Using F as the focal point, enlarge the figure in the ratio 5:3 and give the length of the new sides. (4 marks)

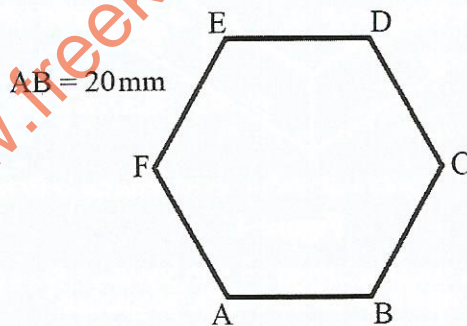


Figure 3

SECTION B (60 marks)

Answer **question 11** on 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 a shaped block drawn in isometric projection.

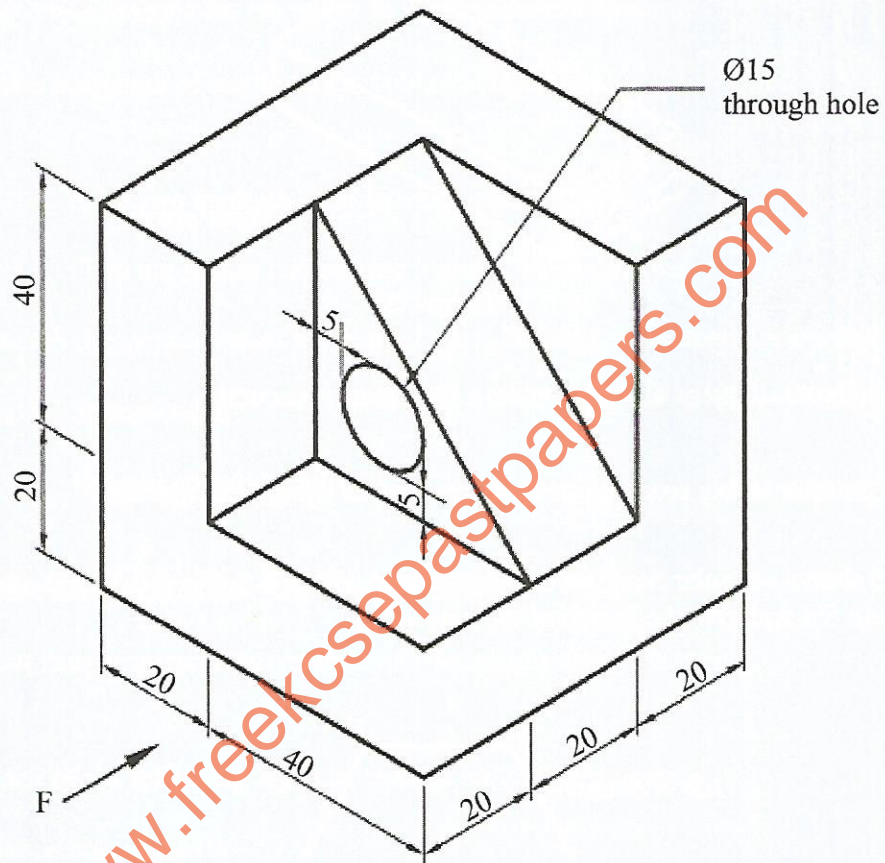


Figure 4

Draw **Full Size** the following views in the first angle projection:

(15 marks)

- (a) Front elevation in the direction of arrow F
 - (b) End elevation
 - (c) Plan
12. (a) Define the term overlay as used in woodwork. (1 mark)
- (b) List **four** tools used in overlaying. (2 marks)
- (c) Sketch and label a pictorial view of a table top decorated with an overlay. (6 marks)

- (d) Sketch the following types of screws: (6 marks)
- (i) Flat head screw
 - (ii) Round head screw
 - (iii) Oval head screw
13. (a) State **five** advantages of seasoning timber. (5 marks)
- (b) Using sketches, show the following timber seasoning defects and include the direction of grains: (6 marks)
- (i) Springing
 - (ii) Twisting
 - (iii) Bowing
- (c) Explain **two** methods of sanding a wide board manually. (4 marks)
14. (a) Outline the procedure of applying shellac polish on a table top. (7 marks)
- (b) (i) Illustrate the correct use of a hand brush when varnishing. (4 marks)
- (ii) Explain how to clean and store a hand brush after use. (4 marks)
15. (a) Sketch and label a dovetail saw. (4 marks)
- (b) Describe **four** characteristics of a dovetail saw. (4 marks)
- (c) **Figure 5** shows the outline of a rectangular shape to be cut on a manufactured board.

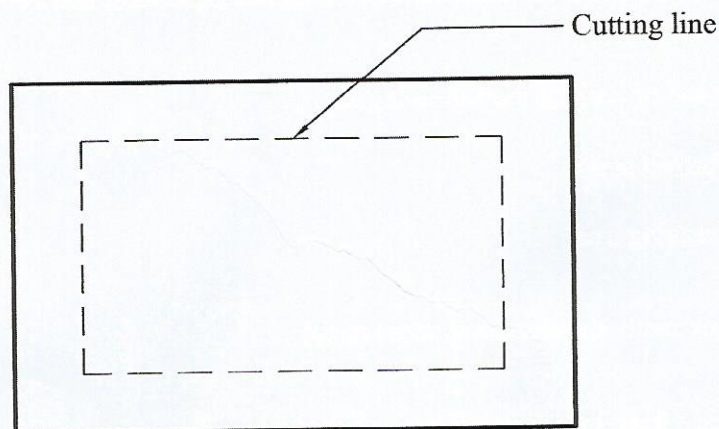


Figure 5

Outline the procedure of cutting out the rectangular shape.

(7 marks)