

4. (a) Texture - is a surface $\frac{1}{2}$ condition resulting from the size $\frac{1}{2}$ and distribution $\frac{1}{2}$ of wood cells $\frac{1}{2}$.
- (b) Figure - pattern $\frac{1}{2}$ or markings which are formed $\frac{1}{2}$ on the surface of processed $\frac{1}{2}$ timber as a result of wood tissue being cut $\frac{1}{2}$ through. 2 x 2 = (4 marks)

5. (a) **Functions of a jointer**
- Makes edges straight and square.
 - Makes rebates, tongues and chamfers.
- 2 x 1 = (2 marks)

(b)

EXTINGUISHING AGENTS	CLASS OF FIRE
Water and sand	A (1)
Chemicals and foam	B (1)

2 x 1 = (2 marks)

6. (a) **Four characteristics of laquer**
- Crystal clear
 - Fast drying
 - Produce hazardous fumes during application
 - Can be sprayed or brushed
 - Do not form layers as thick as most varnishes.

Any 4 x $\frac{1}{2}$ = (2 marks)

(b) **Classification of pencils**

Soft	Medium	Hard
3 B	B	4 H
2 B	HB	2 H

(3 marks)

7. Sectional views of joints

SECTIONAL VIEWS OF JOINTS



Rebated, tongued and grooved joint



Splayed butt joint

Sketches 2 x 2 = 4mks

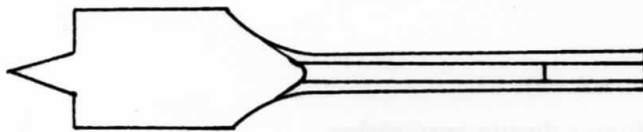
8. Precautions to be observed when using a saw

- No nails/ metallic objects in the workpiece.
- No obstacles in front of the cutting line.
- Ensure that the saw is well maintained.
- Make/ apply uniform strokes to drive the saw.

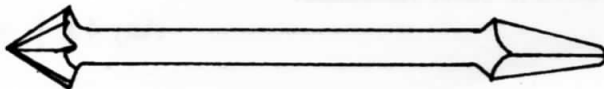
Any 3 x 1 = (3 marks)

9.

FLAT BIT AND ROSEHEAD COUNTERSUNK



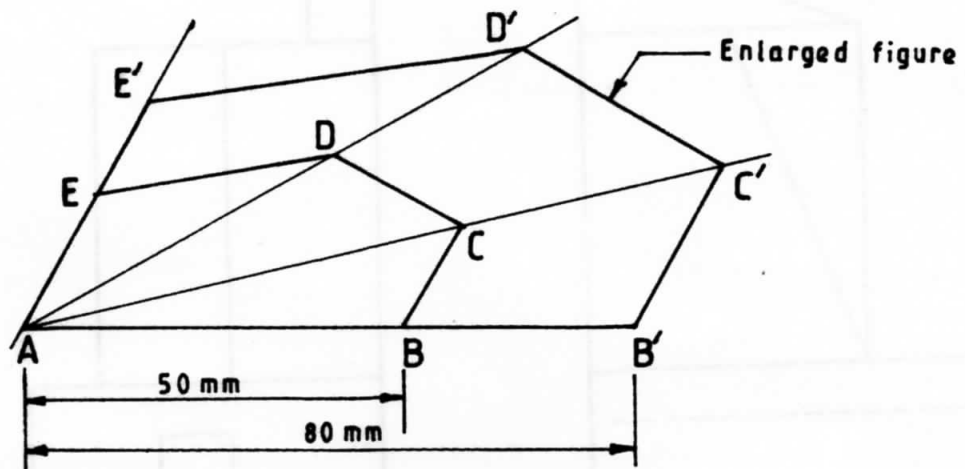
FLAT BIT - Bore holes in all forms of wood quickly and cleanly



ROSEHEAD COUNTERSINK - Enlarging sides of holes

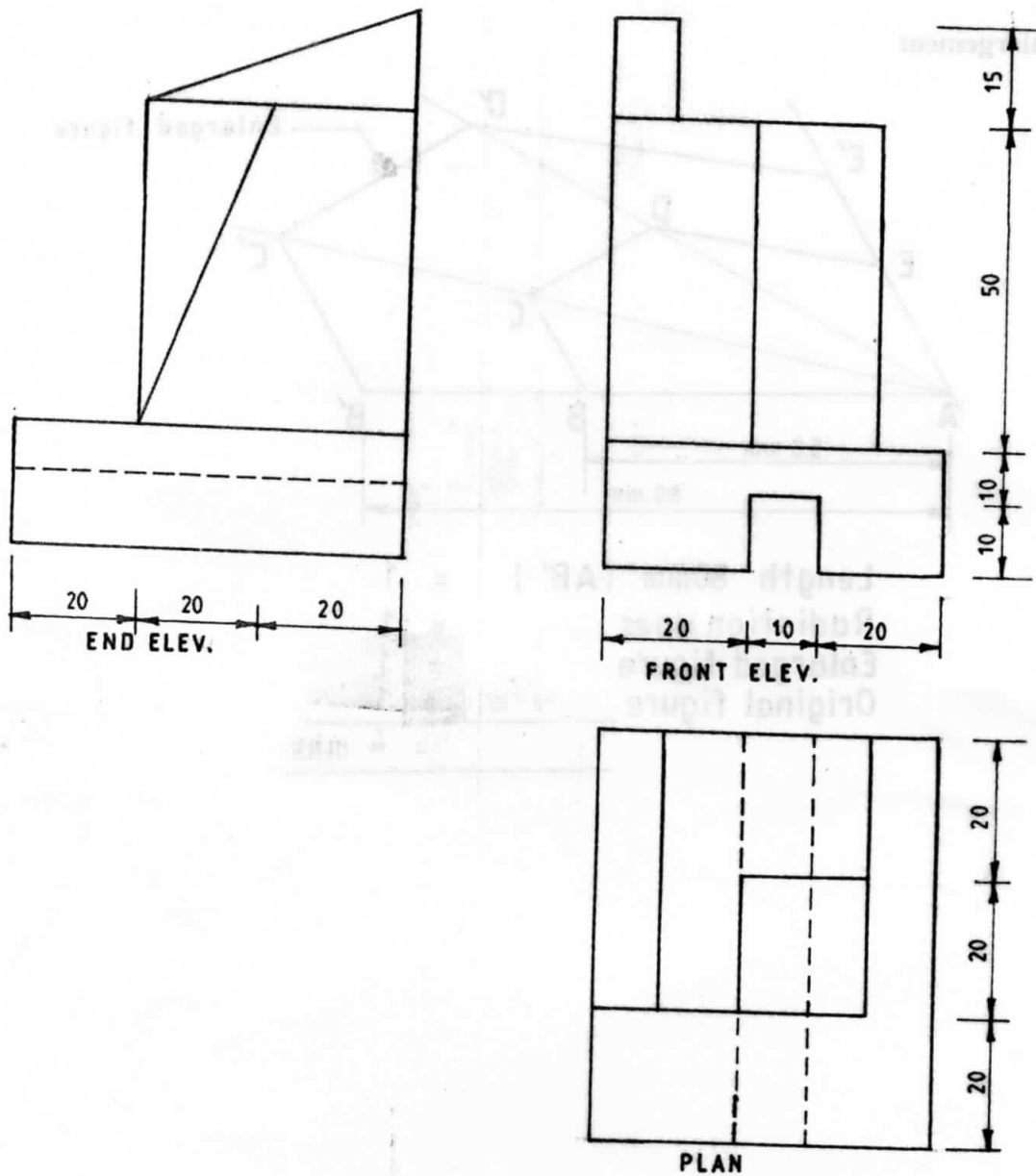
Sketch, 2 x 1 = 2
Function, 2 x 1 = 2
= 4mks

10. **Enlargement**



Length 80mm (AB')	=	1
Radiation lines	=	1
Enlarged figure	=	1
Original figure	=	1
		<hr/>
		= 4 mks

11.



Correct interpretation	=	1
Dimensions, $6 \times \frac{1}{2}$	=	3
Faces, $12 \times \frac{1}{2}$	=	6
Hidden details	=	2
Correct scale	=	1
Construction lines	=	1
Neatness	=	1
	<hr/>	<hr/>
		= 15 mks

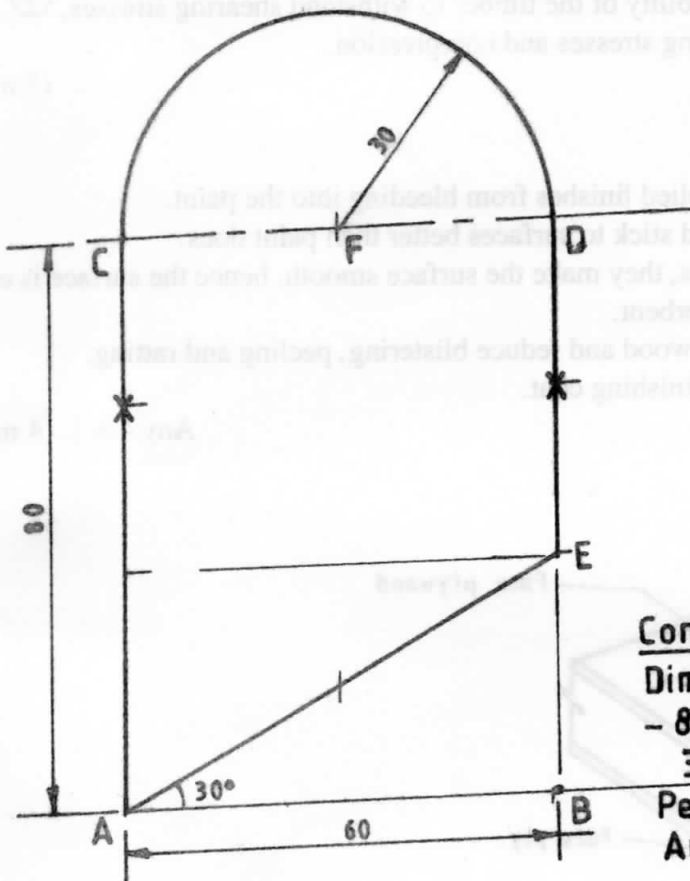
(15 marks)

12. (a) **Precautions to be observed when using a steel tape measure.**

- Do not pull or push the tape when the locking device is engaged.
- Check the accuracy with a vernier calliper to ensure the hook at the end is not bend.
- Do not extend the tape beyond its limits.
- Do not drop the tape.

3 x 1 = (3 marks)

(b) (i)



Constructions:

Dimensions

- 80, 60, R30

$3 \times \frac{1}{2} = 1\frac{1}{2}$

30° Angle

= 1

Perpendiculars

$2 \times \frac{1}{2} = 1$

Arc constr (smooth)

= $\frac{1}{2}$

= 5 mks

(ii) **Step of marking out the shape**

- Establish line AB = 60 mm
- At point A and B construct perpendicular lines.
- At point A and B and along the perpendicular line, mark 80 mm - C and D.
- At point A construct $\angle 30^\circ$ to cut at E.
- Measure 30 mm from point E to establish point F.
- At point F construct an arc 30 mm radius to meet at C and D.
- Join points A, C, D and E to produce the desired shape.

7 x 1 = (7 marks)

14. (a) **Benefits of small business start up**

- Creates employment to the local community.
- Control the rural urban migration
- Generates revenue to the local authority by paying levies.
- Takes services closure to the people.
- Improves the living standards of the local community.
- Makes use of the locally available materials.
- Creates taxable revenue to the Government.

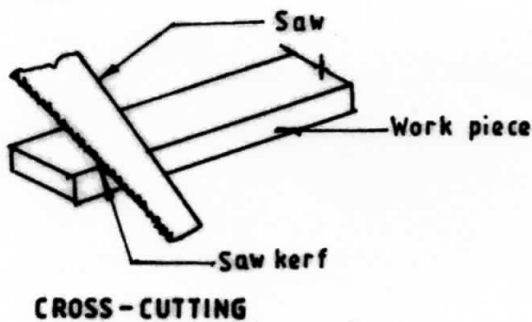
Any 6 x 1 = (6 marks)

(b) **Cutting list**

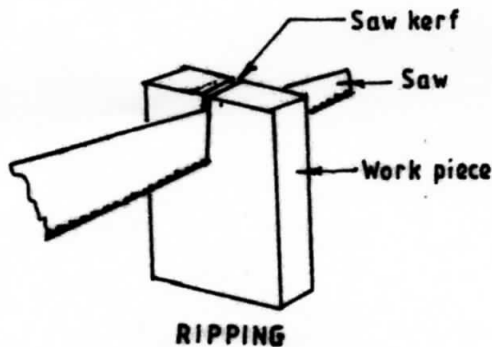
Item No.	Description	Size (mm)	No. Off	Marks
1	Top	25 x 150 x 900	1	= 2
2	Bottom	25 x 200 x 900	1	= 2
3	Sides	25 x 200 x 600	2	= 2
4	Partition	25 x 200 x 600	1	= 2

Format = 1
= 9 marks

15. (a)



Cross-cutting is the act of cutting wood across the grains using a cross-cut saw



Ripping is the act of cutting timber along the grains using a rip saw

Sketches	2 x 2	=	4
Labels, Any	2 x 2 x 1/2	=	2
Description	2 x 1	=	2
			= 8 mks

(b) **Advantages of quarter sawing**

- retains the shape upon drying.
- Produces decorative radial face.
- Produces timber appropriate for joists.

Any 2 x 1 = (2 marks)

Disadvantages

- Expensive form of conversion.
- Creates a lot of waste.
- Ideal for large logs.

Any 2 x 1 = (2 marks)

Total = 4 marks

(c) **Precautions to avoid splitting.**

- Ensure the workpiece is clamped firmly on the bench.
- Select an appropriate chisel.
- Apply light blows to start with.
- Turn the piece and finish from the other side.

Any 3 x 1 = (3 marks)

