

NATIONAL TECHNICAL CERTIFICATE EXAMINATION

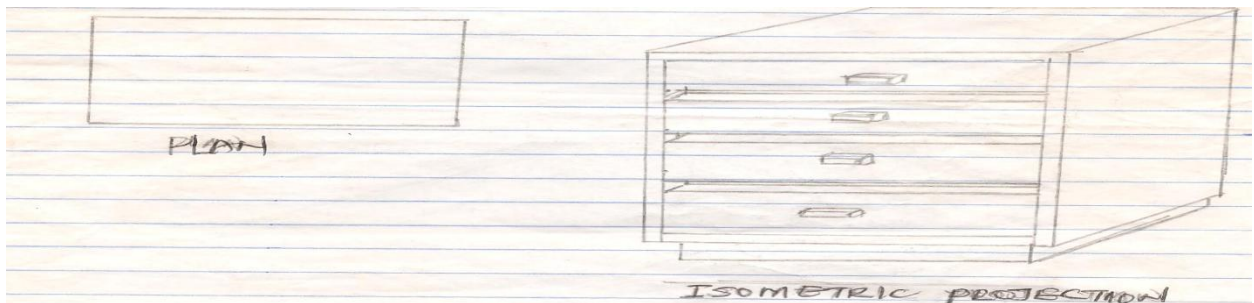
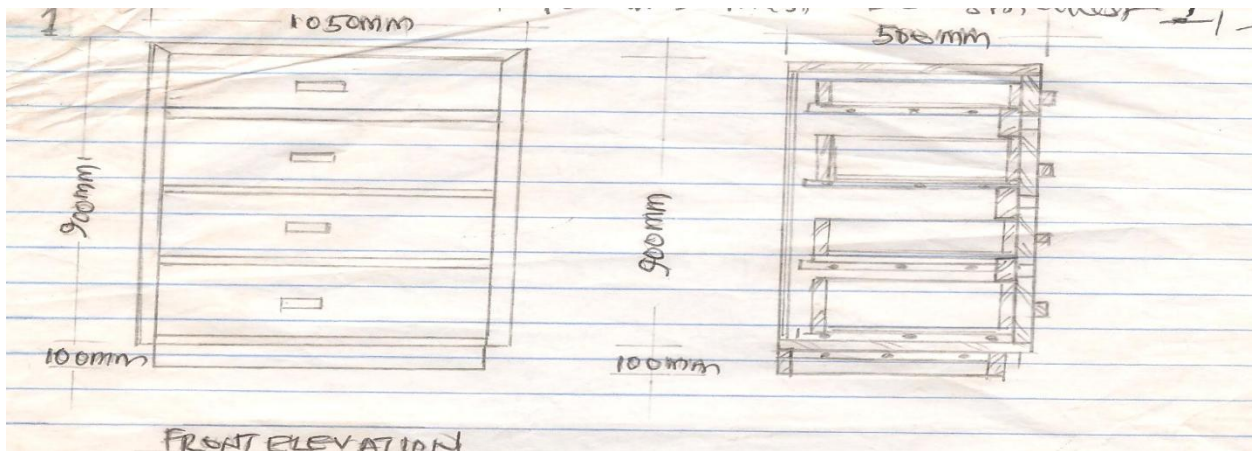
FURNITURE MAKING (FURNITURE DESIGN AND CONSTRUCTION)

PAPER CODE 231 – 1 MAY/JUNE 2008

1. Design a chest of drawer that has four drawers, the top drawer must be smallest sides are
Higher is 900mm
Width is 1050mm
Depth is 500mm
Plinth is 100mm

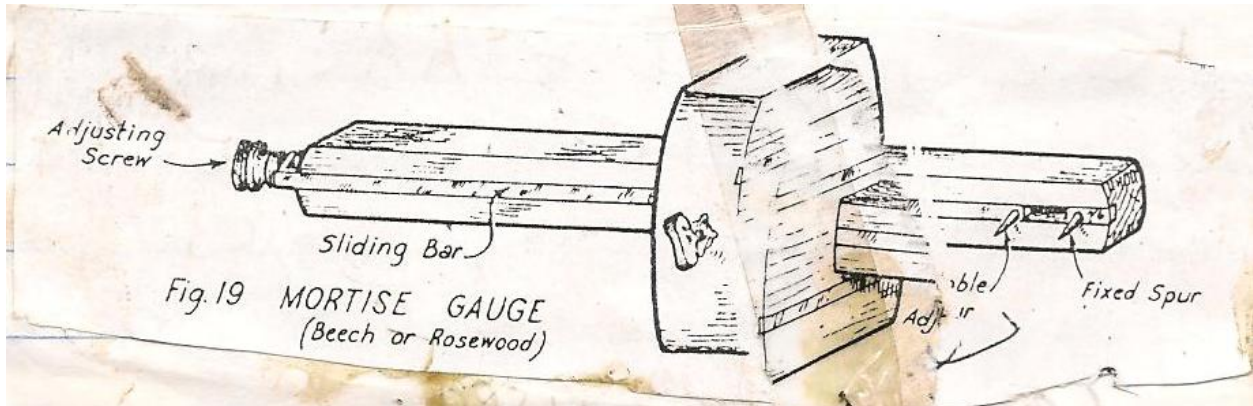
Use scale 1:10 to draw

- (a) Front elevation
- (b) Sectional end view
- (c) Isometric projection.



2. Sketch neatly five of the following tools and state their uses.

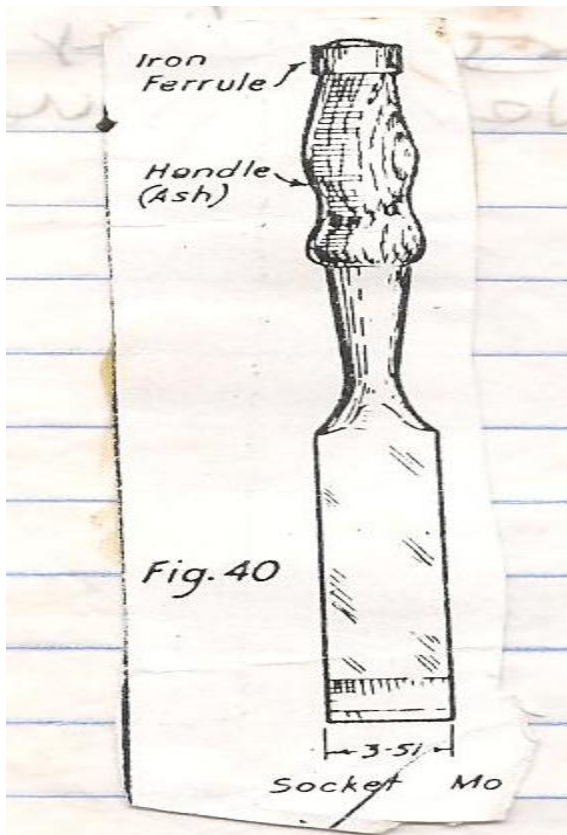
Answer:



Mortise gauge: - it is used to mark two lines parallel to a face or an edge, e.g. for gauging and tenons pins sockets of bridle joints.

(ii) Mortise chisel

Uses: - for extra heavy work mortising. The blade being thicker and stronger than other chisels is able to withstand the blows of the mallet.

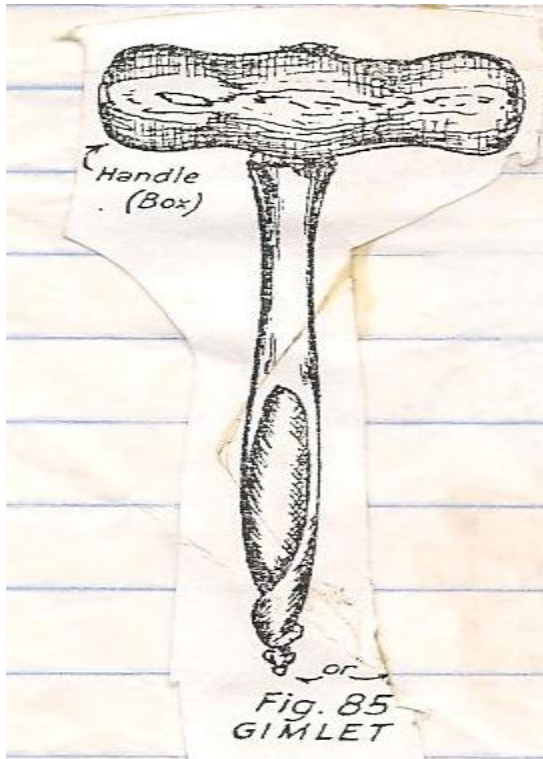


iii. Compass saw

Uses: - Used for cutting large interior or exterior curves. The width of the blade governing the degree of curvature.

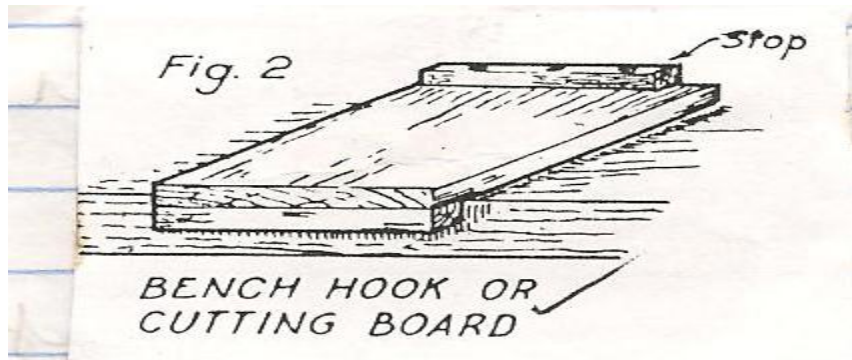


iv. Gimlet.



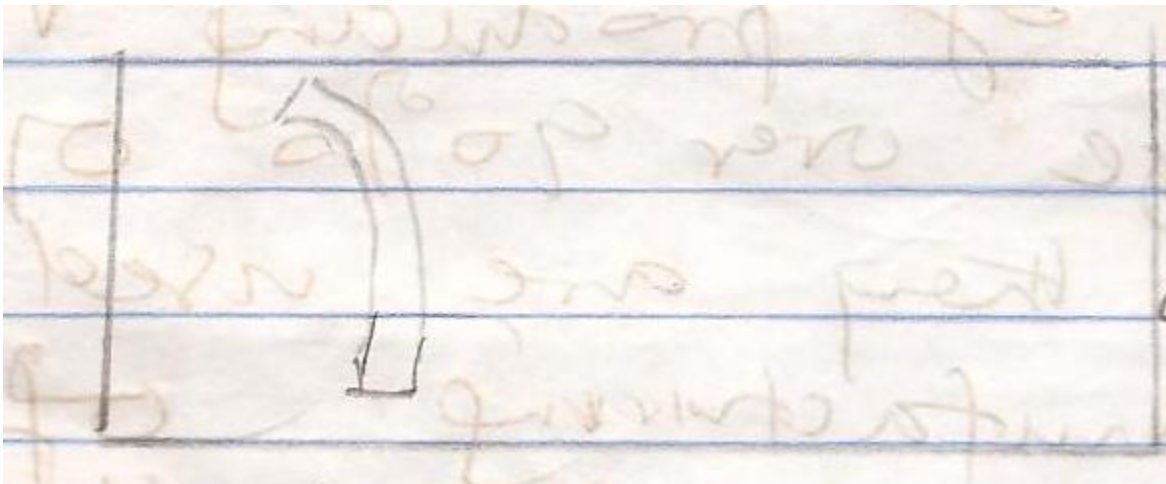
Uses: - A boring tool similar to a nail bit having a small cross handle; fitted to it for hard boring of holes for nails and screws where a brace cannot be used.

v. Cutting board.



Uses: - Used to hold the job while sawing or chiseling and at the same time protecting the bench.

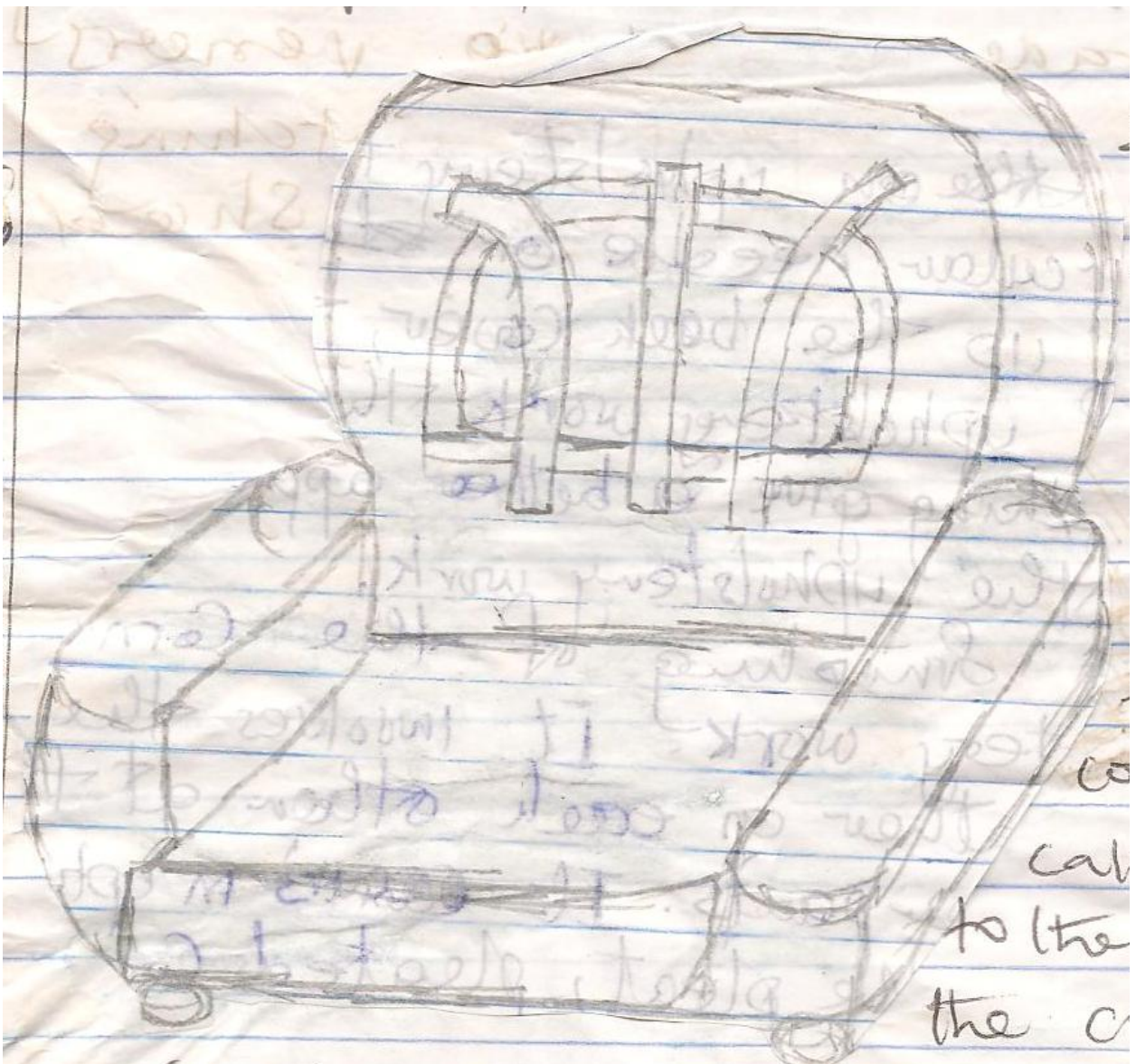
3a. With the aid of sketches describe the process of cutting patterns in upholstery work.



This involves the use of the pattern template that is desired. It is placed on the covering material and marked with a pencil. The pattern will show on the covering material, while the template is kept for further use.

SEWING OF PATTERN IN UPHOLSTERY.

The process of sewing the pattern that is already marked involves cutting the foam of the shape to be sewn. The foam is now gummed to the covering material, and then the calico will be gummed to the foam of the back of the covering material. After drying the gummed pieces together, the shape is now sewn to the required shape of the template pattern before covering for the final process.



3b. List three advantages in (a) above.

- (i) It gives accurate marking of the desired designed.
- (ii) It makes the job easier to produce because the template pattern gives direction.
- (iii) It saves cost because wasting of material will be drastically reduced.

4. Explain the following in upholstery work.

1. Stuffing: - Stuffing is the materials that are used in upholstery to pad the seat and the back of upholstery.

2. Lashing: - It is the process of tying spring with cord in upholstery work.

3. Sticking: - This is an upholstery term whereby semi circular needles or boyanut needle with twine to twine to sew up the parts, the side and other seats of upholstery that requires needle work.

4. Pleating: - It involves the folding layers of fabric or leather on each other at the corners, edges and other parts. It occurs in upholstery such as single pleat, double pleat, and pleated corner e.etc

5a. STATE THREE METHODS OF PRODUCING VENEERS.

- i. Sawing: - Hard brittle woods with extremely wild grain are sometimes cut into veneers by large thin gauge segmental circular saws.
- ii. Rotary cutting or peeling: - it is the most economical method of producing veneers, the sheets are large over 90% of veneers are peeled they are used extensively for manufacturing of ordinary three ply cores for multi-ply.
- iii. Slice - Cutting: - It is used for cutting valuable high grade decorative veneers usually radically cut. Perfect matching for face veneers is possible with sliced veneers.

Show with the aid of sketch 5 ply manufacture board.

