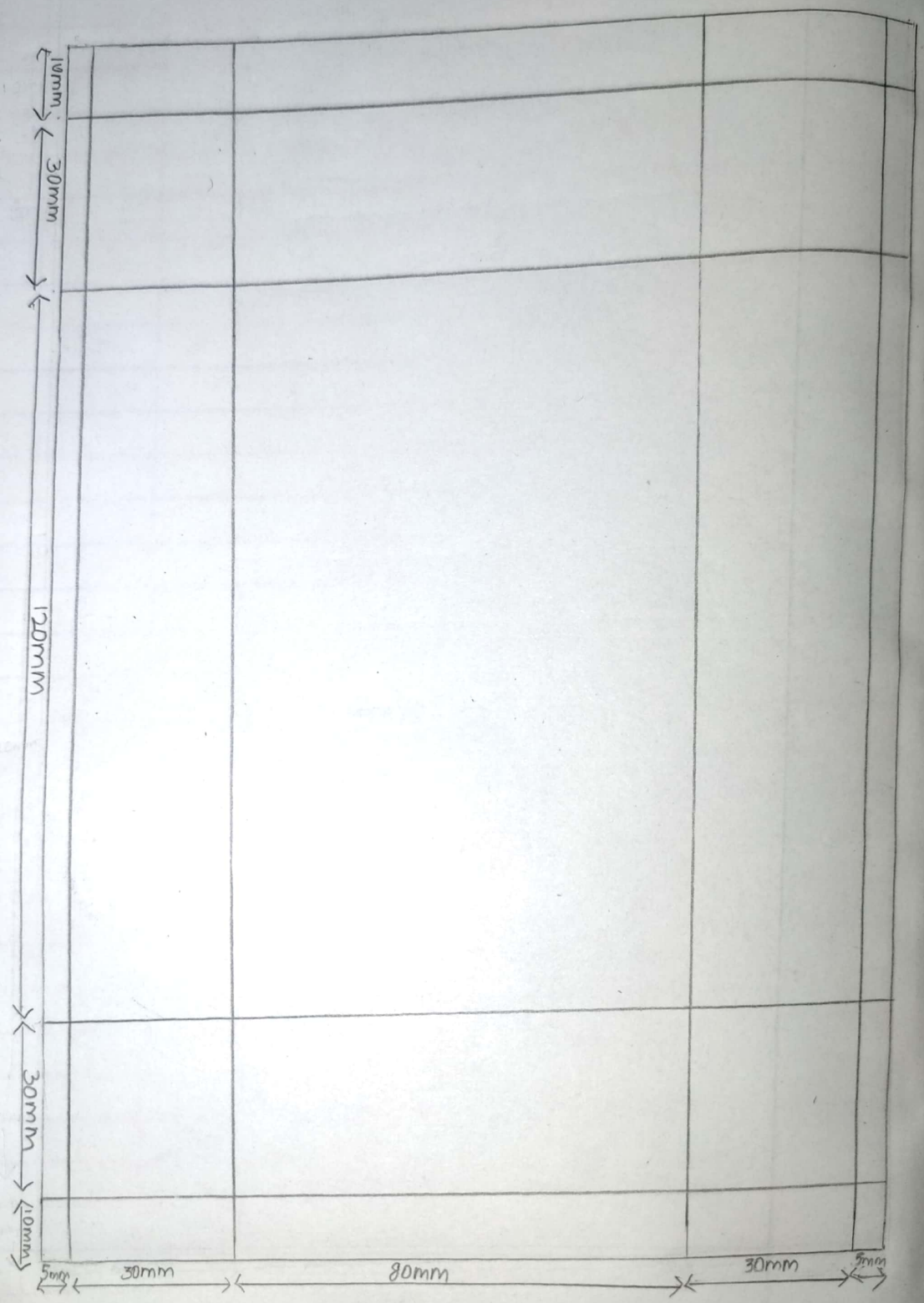

Figure (A)

Expt01

TRAY MAKING

AIM:

To make a rectangular tray of given size from a sheet metal piece.

APPLICATION:

Cabinets of stabilizer, computer, UPS etc.

SUPPLIED MATERIAL SPECIFICATION:

Galvanised Iron sheet of dimension 200mm x150mm, Thickness 26 gauge.

TOOLS REQUIRED:

Steel rule
Anvil or Bench plate
Scriber
Square mallet
Straight snip
Try square

PROCEDURE:

I Checking

1. Check whether the given sheet is having its dimension as 200mm x150mm. If the dimension is excess trim it using hand shear.
2. Keep one corner of the sheet between body & tongue of steel square & check whether the sides exactly coincide with steel square.
3. Keep the corner as reference corner & these two sides as reference sides. this corner should be kept at left side bottom position.

II Layout Marking

1. using steel rule & scriber draw horizontal line at a distance of 10mm, 35mm, 165mm, 190mm, 200mm from reference vertical edge.
2. Similarly with respect to bottom edge draw a vertical lines at a distance of 5mm, 20 mm, 120mm, 145mm & 150mm.

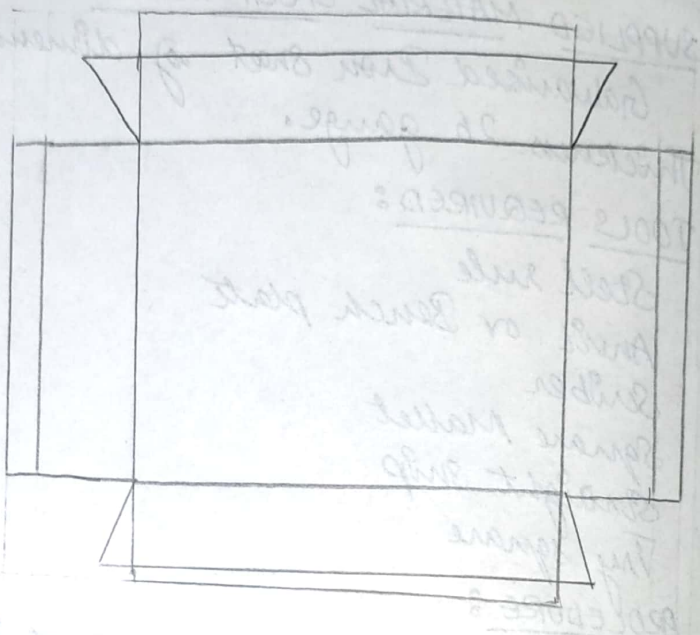

Figure (B)

III Shearing

1. To remove portion A cut along the direction shown by arrow.
2. To remove portion B cut along the direction shown. Use hand gloves to remove the cut portion.

IV Folding

1. Keep the pattern over square stake such that the inner line of hem portion I exactly coincide with the edge of stake.
2. Fold this portion 90° downwards with the help of mallet.
3. remove the sheet, make further 90° fold over the portion I so that it form a hem along edge. Similarly fold the portion J also.
4. Place the sheet over the stake such that the line 1-2 coincides with the stake edge.
5. Bend the portion C, 90° downwards using mallet ✓.
6. Similarly bend portions D, E and F in the same order.

V Locking & Seaming

1. The incomplete tray is having four corners. Keep one corner in align with the corner of stake. Using mallet fold projection (Triangle in shape) 90° towards the tray. Repeat this step for all other projection.
2. Fold the remaining portion G & H 180° outwards using stake and mallet to lock the folds.
3. check the dimensions.

Result:

Thus the required Rectangular tray is made out of the given sheet metal piece.