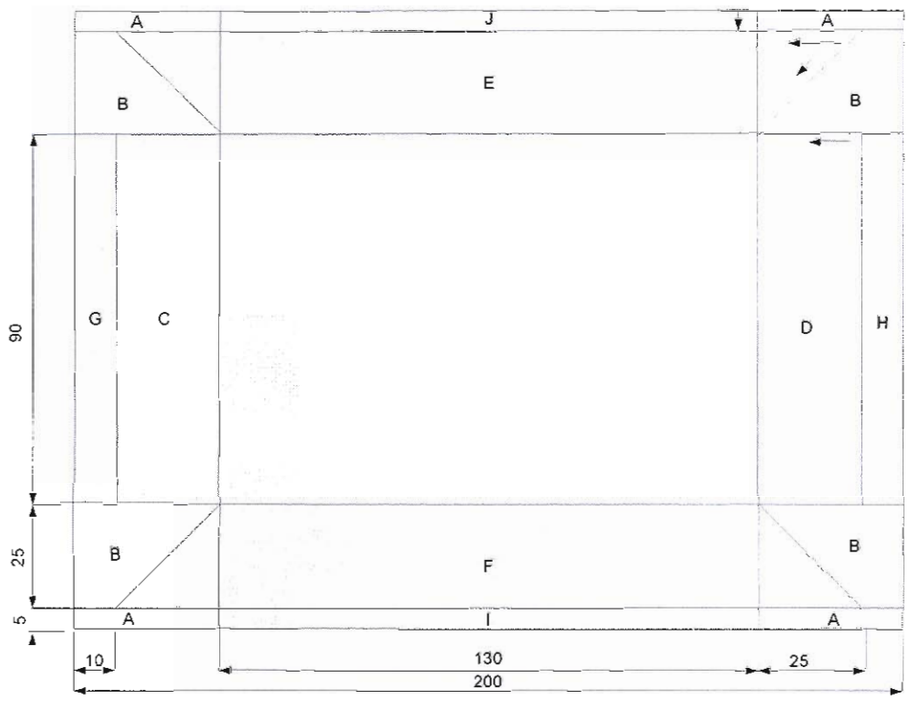
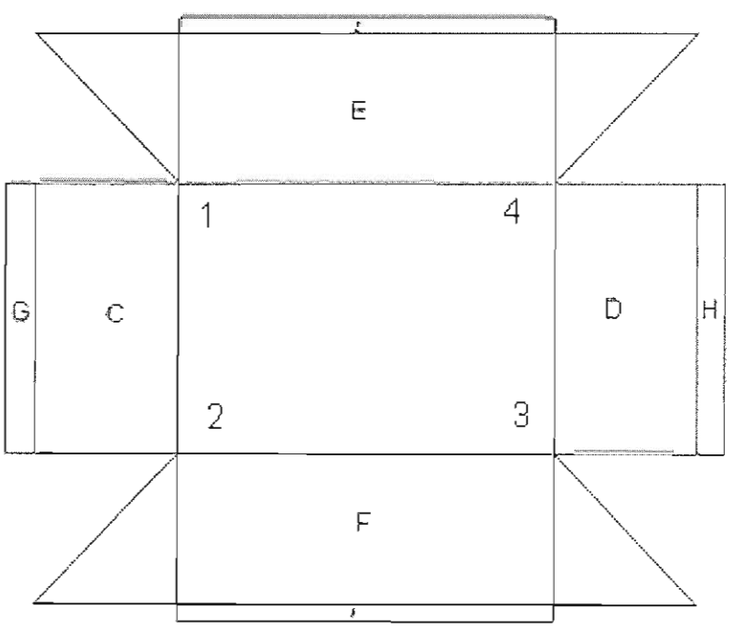


Layout of Tray



Pattern

Exercise No:	RECTANGULAR TRAY MAKING
Date:	

AIM

To make a Rectangular Tray of given size from a sheet metal piece.

APPLICATION

Cabinets of stabilizer, computer, UPS etc

SUPPLIED MATERIAL SPECIFICATION

Galvanized Iron sheet of dimensions 200mm x 150mm, Thickness 26 gauge

TOOLS REQUIRED

1. Steel rule	2. Scriber	3. Steel square	4. Straight snip
5. Anvil or Bench plate	6.Stake	7. Mallet	

SEQUENCE OF OPERATIONS

I. Checking II. Layout Marking III. Shearing IV. Folding V . Locking and Seaming

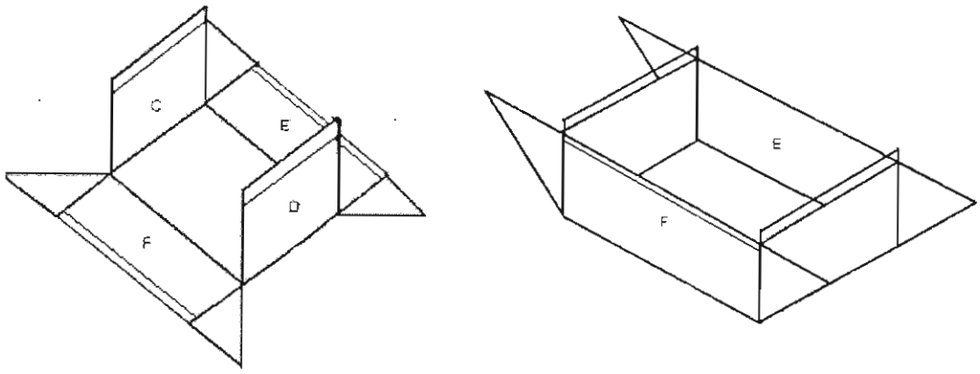
WORKING STEPS

I. Checking

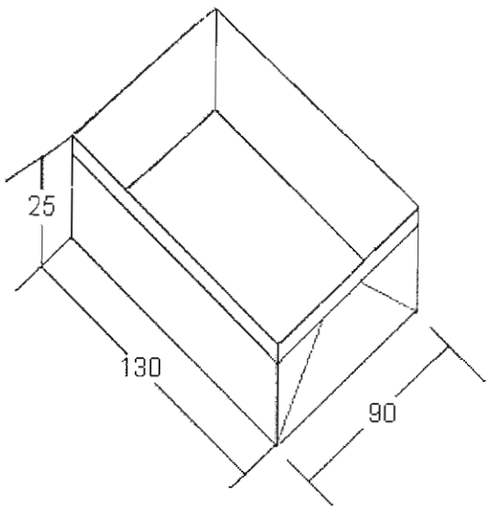
1. Check whether the given sheet is having its dimension as 200mm x 150mm. If the dimension is excess trim off using hand shear.
2. Keep one corner of the sheet between body and tongue of Steel Square and check whether the sides exactly coincide with Steel Square.
3. Keep this corner as reference corner and these two sides as reference sides. This corner should be kept at left hand side bottom position.

II. Layout Marking

1. Using steel rule and scriber draw five vertical lines at a distance of 10mm, 35mm, 165mm, 190mm and 200mm from reference vertical edge.
2. Similarly with respect to bottom edge draw five horizontal lines at a distance of 5mm, 30mm, 120mm, 145 mm and 150mm.
3. Shade the unwanted portions as shown in figure. Portions G,H,I and J are called as seam allowances.



Intermediate stages



Finished Tray

III. Shearing

1. To remove portion A cut along the direction shown by arrows.
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 coincides 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 the 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 and Seaming

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

RESULT

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