Wood Working

Familiarity with different types of woods used and tools used in wood working and make following joints

1. Half – Lap joint
2. Mortise and Tenon joint
3. Corner Dovetail joint or Bridle joint.

Exercise No. 1

Half-Lap Joint

AIM: To prepare a Half lap joint of the given dimensions.

Materials Required: Teak wood piece of dimensions.

Tools Required: Hand sew, Jack plane, steel rule, mallet, marking gauge, firmer chisel, try square.

Sequence of operations: Planning, cutting, marking, sawing, chiseling, and joining.

Procedure:

1. The given piece of wood is fitted to the carpentry vice; planing is done on all the four sides to the required dimensions with the help of the jack plane, steel rule and try square.
2. The planed wooden piece is cut into two halves by hand saw.
3. Then the two pieces are marked as per the drawing of half lap joint, with the help of try square, marking gauge and steel rule.
4. Un wanted material of the two wooden pieces is removed by sawing and chiseling.
5. The above two finished pieces are joined to form the half lap joint.

Precautions:

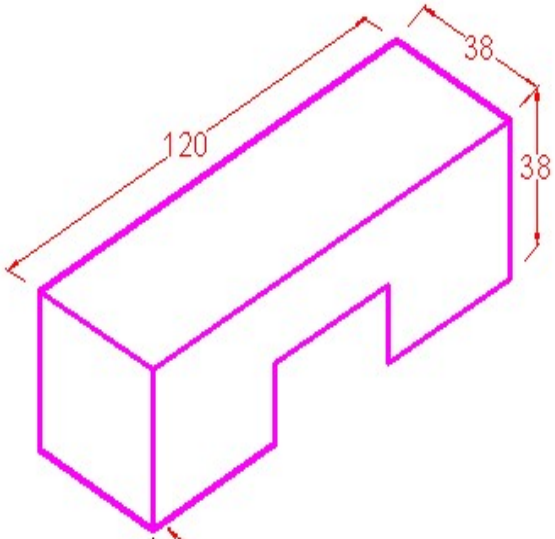
1. The wooden pieces should be fitted between jaws of carpentry vice tightly.
2. While planing, uniform pressure should be applied.
3. Chiseling must be done layer by layer so that we get a fine finish.

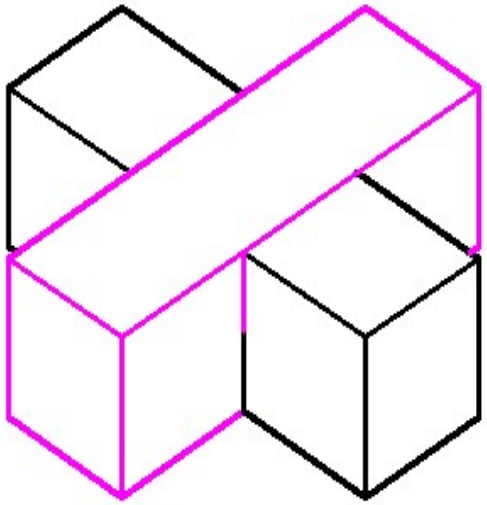
Result:

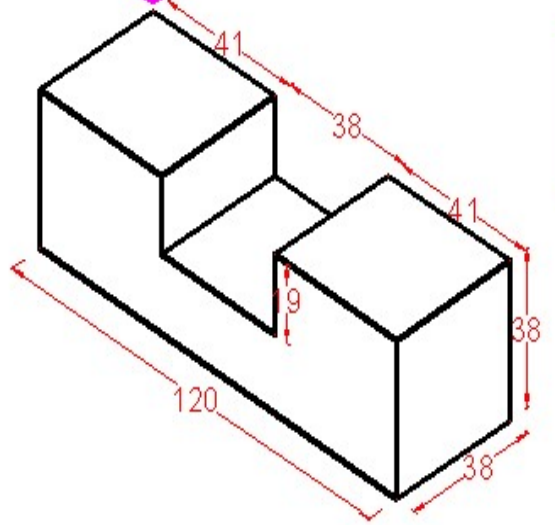
The Half lap joint of required dimensions is obtained.

Exercise No:1

AIM: TO MAKE CROSS HALFING JOINT







ALL DIMENSIONS ARE IN MM

Exercise No. 2

Mortise and Tenon joint

AIM: To prepare a Mortise and Tenon joint of the given dimensions.

Materials Required: Teak wood piece of dimensions.

Tools Required: Hand sew, Jack plane, steel rule, mallet, marking gauge, firmer chisel, try square.

Sequence of operations: Planning, cutting, marking, sawing, chiseling, and joining.

Procedure:

1. The given piece of wood is fitted to the carpentry vice; planning is done on all the four sides to the required dimensions with the help of the jack plane, steel rule and try square.
2. The planned wooden piece is cut into two halves by hand saw.
3. Then the two pieces are marked as per the drawing of Mortise and Tenon joint, with the help of try square, marking gauge and steel rule.
4. Un wanted material of the two wooden pieces is removed by sawing and chiseling.
5. The above two finished pieces are joined to form the Mortise and Tenon joint.

Precautions:

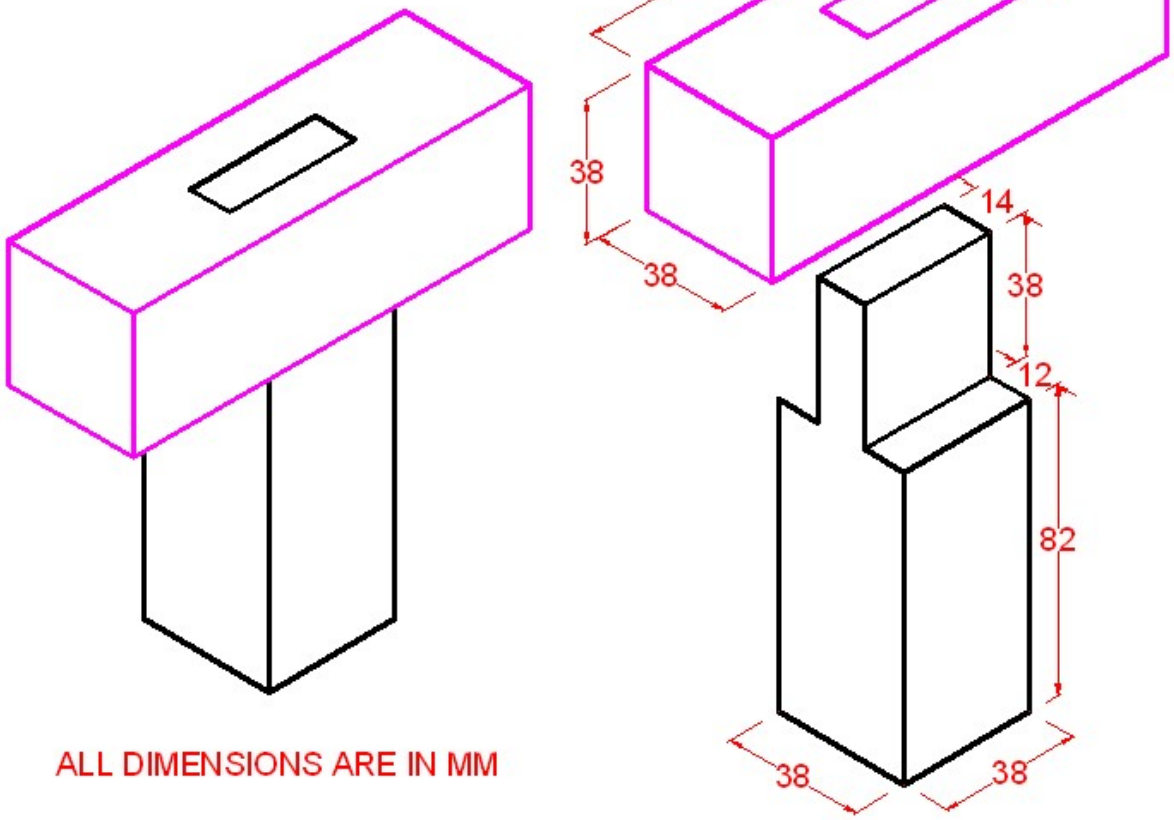
1. The wooden pieces should be fitted between jaws of carpentry vice tightly.
2. While planing, uniform pressure should be applied.
3. Chiseling must be done layer by layer so that we get a fine finish.

Result:

The Mortise and Tenon joint of required dimensions is obtained.

Exercise No:2

AIM: TO MAKE MORTISE AND TENON JOINT



ALL DIMENSIONS ARE IN MM

Exercise No. 3

Corner Dovetail lap joint or Bridle joint

AIM: To prepare a Dovetail lap joint of the given dimensions.

Materials Required: Teak wood piece of dimensions.

Tools Required: Hand sew, Jack plane, steel rule, mallet, marking gauge, firmer chisel, try square.

Sequence of operations: Planning, cutting, marking, sawing, chiseling, and joining.

Procedure:

1. The given piece of wood is fitted to the carpentry vice; planning is done on all the four sides to the required dimensions with the help of the jack plane, steel rule and try square.
2. The planned wooden piece is cut into two halves by hand saw.
3. Then the two pieces are marked as per the drawing of Dovetail lap joint, with the help of try square, marking gauge and steel rule.
4. Un wanted material of the two wooden pieces is removed by sawing and chiseling.
5. The above two finished pieces are joined to form the Dovetail lap joint.

Precautions:

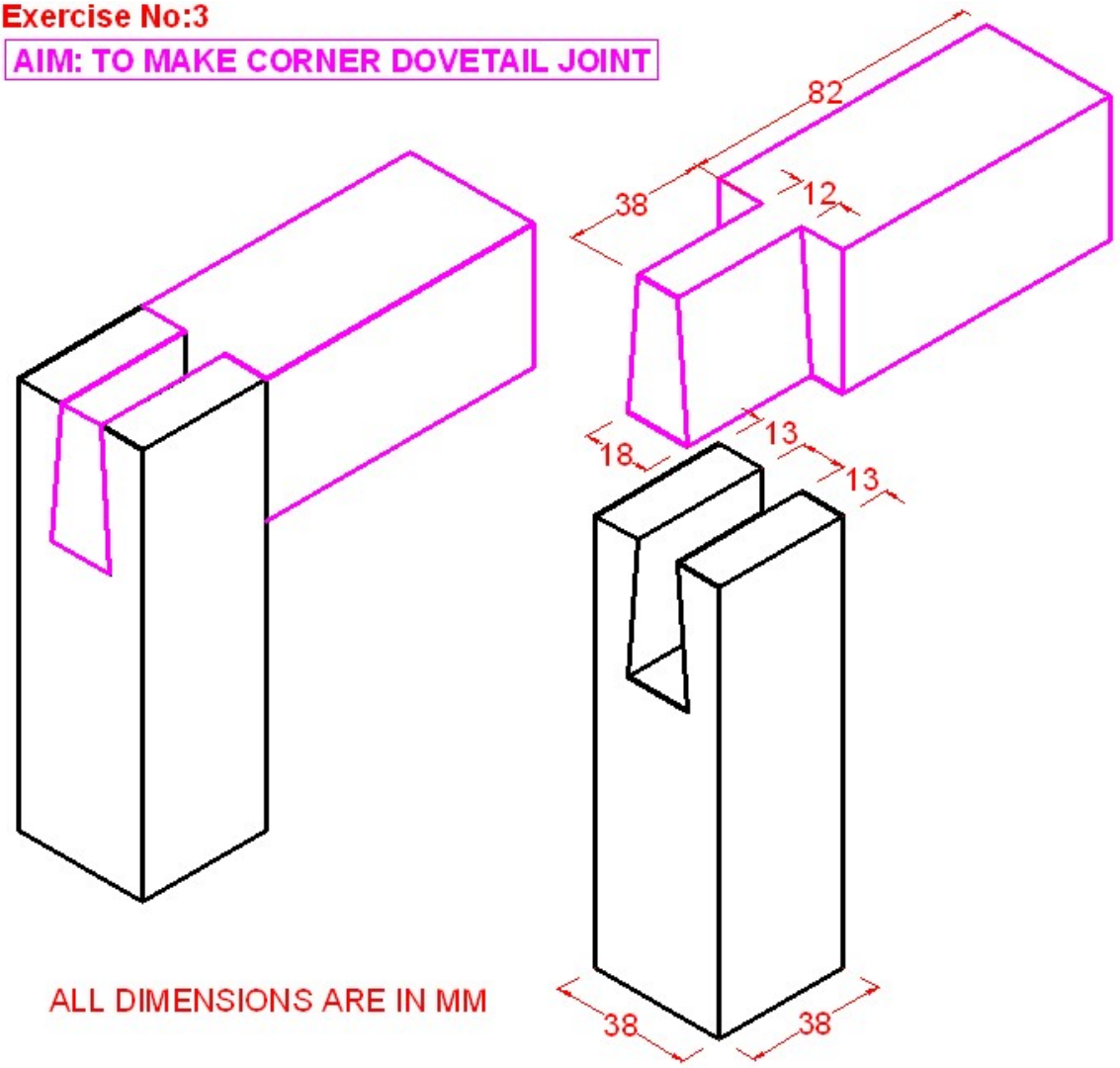
1. The wooden pieces should be fitted between jaws of carpentry vice tightly.
2. While planing, uniform pressure should be applied.
3. Chiseling must be done layer by layer so that we get a fine finish.

Result:

The Dovetail lap joint of required dimensions is obtained.

Exercise No:3

AIM: TO MAKE CORNER DOVETAIL JOINT



ALL DIMENSIONS ARE IN MM