

# Class GD-121-Basic Drafting

## Lecture No 09: Orthographic Projection and its main Views.

### Introduction of the Lecture:

This is such a type of drawing in which Parallel Projection is used for the preparation of the drawing of an object. These lines are perpendicular to the plane. In this drawing, it is assumed that the object is at infinity. The shape of an object is seen in actual size in such drawing.

A plane is an imaginary surface on which pictures are prepared imaginably. Then it is transferred to the paper.

This plane is faced toward the object whose view is to be prepared.

Generally, three views of an object are prepared. These are Top View, Front View, and Side View.

If the plane is kept in a vertical position, then it is called the vertical plane.

If the plane is kept in a horizontal position, then it is called the horizontal plane.

The plane, horizontal or vertical, which are kept perpendicular to each other are called Principal Planes.

These include the Frontal Plane, Profile Plane, and Horizontal Plane: In addition to this, if a plane is placed at any other place, then it is called Auxiliary Plane.

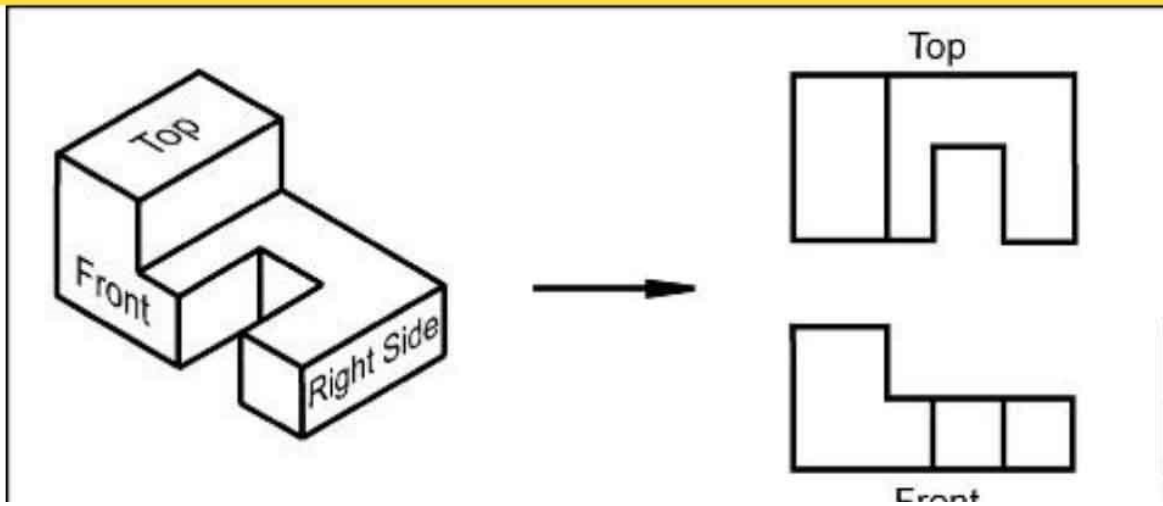
These are used to draw inclined surfaces of an object. If these are placed in such a way that they form four Quadrants, then this figure is called Dihedral angle.

If these are placed in such a way that they form eight quadrants, then this figure is called Trihedral angle.

If the first Quadrant is used to draw the projections, then this system is called First Angle System.

If the third quadrant is used, then this system is called the Third Angle System. In the First Angle System, the top view is placed below while the front view is upward and the side view is by the side of the front view.

# ORTHOGRAPHIC PROJECTI



Video Link for demonstration.

- 1) <https://www.youtube.com/watch?v=1sjaelzuGAK>
- 2) <https://www.youtube.com/watch?v=CACQU-Oe3rQ>