

# CHAPTER 3 : Coordinate Geometry

- Two perpendicular lines (one horizontal and other vertical) are required to locate the position of a point or an object.
- The plane is called the Cartesian or coordinate plane and the lines are called coordinate axes or rectangular axes.
- Horizontal line is called the  $x$ -axis and vertical line is called the  $y$ -axis.
- The coordinate axes divide the plane into four parts called quadrants.

## *About Cartesian Plane :*

1. Distance of any point from the  $y$ -axis is called  $x$ -coordinate or abscissa.
2. Distance of any point from the  $x$ -axis is called  $y$ -coordinate or ordinate.
3. Origin :  $(0,0)$
4. Point on  $x$ -axis :  $(x, 0)$ .
5. Point on  $y$ -axis :  $(0, y)$ .
6. There are four quadrants of a coordinate plane :

