2. Graphical Representation of Biometric Data

Introduction. In previous chapter we have discussed that Raw data represented by frequency distribution makes the fact simple and easily understandable. After classwise or groupwise tabulation the frequencies of a characteristic can be presented by two kinds of drawings—*graphs* and *diagrams*. This makes the thing more easily understandable.

Some basic knowledge is essential for the preparation of *graph* of Statistical data. *Graph* is prepared with the help of two lines. The horizontal line of graph is called *Abscissa* or 'X' axis representing independent variable and the vertical line is known as *ordinate* or 'Y' axis representing dependent variable. The meeting point of 'X' and 'Y' axis is called zero (O) or origin point.

The right part of 'X' axis from the zero point ('0') is positive (+) and left part is negative (–). Likewise the upper part of 'Y' axis from zero point is positive while the lower part is negative. 'X' and 'Y' axis meet each other at 'O' point and graph divided into 4 parts. Each part is called Quadrant. Upper right part is called first Quadrant where 'X' and 'Y' both axis are positive. Upper left part is called 2nd Quadrant. Here 'X' axis is negative (–) and 'Y' axis is positive. The lower left part is called their quadrant where 'X' and 'Y' both axes are negative. The lower right part is known as Fourth Quadrant where 'X' axis positive (+) and 'Y' axis is negative (–). Mostly first quadrant is used for graphical representation of statistical data, where both axis are positive.
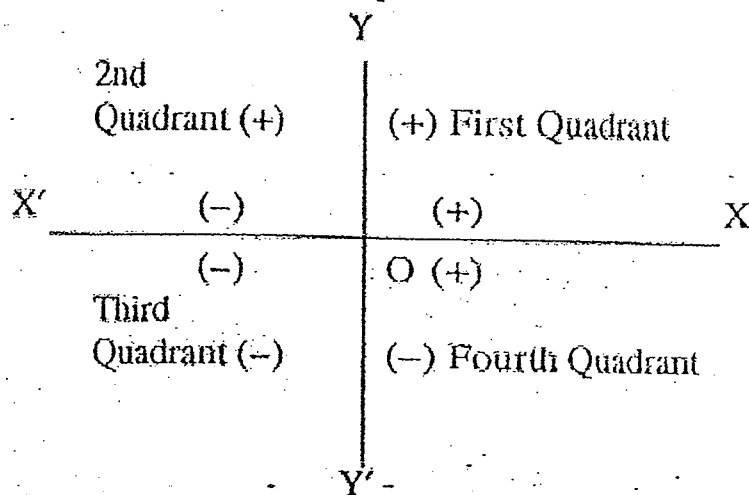

Fig. 2.1. Two axes "X" and "Y" meeting each other on "O" point producing 4 Quadrants.