Diagrammatic Presentations of Data

A diagram is a visual form for the presentation of statistical data. They present the data in simple, readily comprehensible form. Diagrammatic presentation is used only for presentation of the data in visual form, whereas graphic presentation of the data can be used for further analysis. There are different forms of diagram e.g., Bar diagram, Sub-divided bar diagram, Multiple bar diagram, Pie diagram and Pictogram.

Bar Diagram: This is known as dimensional diagram also. Bar diagram is most useful for categorical data. A bar is defined as a thick line. Bar diagram is drawn from the frequency distribution table representing the variable on the horizontal axis and the frequency on the vertical axis. The height of each bar will be corresponding to the frequency or value of the variable.

Sub- divided Bar Diagram: Study of sub classification of a phenomenon can be done by using sub-divided bar digram. Corresponding to each sub-category of the data the bar is divided and shaded. There will be as many shades as there will sub portion in a group of data. The portion of the bar occupied by each sub- class reflect its proportion in the total.

Multiple Bar Diagram: This diagram is used when comparison are to be shown between two or more sets of interrelated phenomena or variables. A set of bars for person, place or related phenomena are drawn side by side without any gap. To distinguish between the different bars in a set, different colours, shades are used.

Pie Diagram: It is also known as angular diagram. A pie chart or diagram is a circle divided into component sectors corresponding to the frequencies of the variables in the distribution. Each sector will be proportional to the frequency of the variable in the group. A circle represent 3600. So 360 angle is divided in proportion to percentages. The degrees represented by the various component parts of given magnitude can be obtained by using this formula.

After the calculation of the angles for each component, segments are drawn in the circle in succession corresponding to the angles at the center for each segment. Different segments are shaded with different colour, shades or numbers.

Pictograms: It is known as cartographs also. In pictogram we used appropriate picture to represent the data. The number of picture or the size of the picture being proportional to the values of the different magnitudes to be presented. For showing population of human beings, human figures are used. We may represent 1 Lakh people by one human figure. Pictograms present only approximate values.