

Statistics: Graphical Representation

Statistical data can be represented graphically by several ways.

1. A **histogram** is a graphical representation of a frequency distribution (in continuous form) in the form of rectangles with class intervals as bases and corresponding frequencies as heights, with no gap between any two successive rectangles.
2. **Frequency polygons** are another way of displaying data using straight line segments.
3. The **cumulative frequency** is the accumulated or sum of frequencies up to a particular point. A table showing the cumulative frequencies is called a **cumulative frequency distribution**.
4. Grouped data are also represented by a curve called ogive or cumulative-frequency curve.
5. Construction of Cumulative Frequency Curve or an ogive:
 - i. Construct a cumulative frequency table
 - ii. Mark the actual class limits along x-axis
 - iii. Mark the cumulative frequencies of respective classes along y-axis
 - iv. Plot the points corresponding to cumulative frequency at each upper limit point.
 - v. Join the points plotted by a free hand curve.
6. An ogive is always started from a point on x-axis representing the lower limit of the first class and is terminated at the upper limit of the last class.
7. An ogive is always a rising curve.