**[Que-21] - What do you mean by skewness. Explain its types. Use graph to show.**

**Skewness** refers to the asymmetry or lack of symmetry in the distribution of data. In a perfectly symmetrical distribution, the mean, median, and mode are all the same. When the distribution is not symmetrical, it is said to be skewed. Skewness can be either positive or negative, and it indicates the direction and relative magnitude of the deviation from the symmetrical bell curve.

### **Types of Skewness**

1. **Positive Skewness (Right Skewness):**
   * In a positively skewed distribution, the tail on the right side of the distribution is longer or fatter than the left side.
   * Most of the data values cluster on the left side with the tail pointing towards the higher values.
   * The mean is usually greater than the median, which is greater than the mode.
2. **Negative Skewness (Left Skewness):**
   * In a negatively skewed distribution, the tail on the left side of the distribution is longer or fatter than the right side.
   * Most of the data values cluster on the right side with the tail pointing towards the lower values.
   * The mean is usually less than the median, which is less than the mode.
3. **Zero Skewness (Symmetrical Distribution):**
   * In a symmetrical distribution, the left and right sides of the distribution are mirror images of each other.
   * The mean, median, and mode are all equal.
   * There is no skewness as the distribution is perfectly symmetrical.