

Dr. Ranyan

Base (H) 200
Part - I
Part - II

Mode

This is another form of Average. The value of variable which has maximum frequency is called the Mode. In fact, in case of several observations taken during an experiment, a specific observation or observations may come several times repeatedly. The observations which occurs the largest no. of times represents the Mode of the observation. When the concept of data occurs at two or more points on a scale of values, such experiments is referred to as Bimodal / Multimodal depending upon the no. of such values.

Mode is obtained from the following formula,
$$\text{Mode} = \text{Mean} - 3 (\text{Mean} - \text{Median})$$

Q: Calculation of Mode.

Example - Calculate the Mode from the following experimental data.

6, 6, 7, 7, 8, 8, 8, 12

$$\text{Mean} = \frac{62}{8} = 7.75$$

Median = Mean of $\frac{N}{2}$ th & $\frac{N}{2} + 1$ th observations

$$\begin{aligned} \text{Mean of 4th \& 5th observation observations} \\ = \text{Mean of } 7 \text{ \& } 8 = 7.5 \end{aligned}$$

$$\begin{aligned} \text{Mode} &= \text{Mean} - 3 (\text{Mean} - \text{Median}) \\ &= 7.75 - 0.75 = 7.0 \end{aligned}$$

