

Business Statistics



Meaning of Statistics

- The word statistics is used in three different senses:
 1. Statistics as Singular
 2. Statistics as Plural
 3. Statistics as a Plural of Statistic

Meanings of Statistics

The word statistics has three different meanings (sense) which are discussed below:

- (1) **Plural Sense**
- (2) **Singular Sense**
- (3) **Plural of the word "Statistic"**

Meaning of Statistics

- **Statistics as singular:**

- branch of knowledge that deals with the collection, organization, classification, presentation, summarization, analysis, and interpretation of statistical data in any field of inquiry

- **Statistics as plural:**

- refer to numerical facts and figures collected in a systematic manner with a definite purpose in any field of study
 - In this sense, statistics are also aggregates of facts which are expressed in numerical form

- Example:** Statistics on industrial production, statistics on population growth of a country in different years etc.

- **Statistics as a plural of statistic:**

- used as the plural of the word “Statistic” which refers to a numerical quantity like mean, median, variance etc..., calculated from sample value

- Example:** If we select 15 student from a class of 80 students, measure their heights and find the average height. This average would be a statistic.

Meanings of Statistics

(1) **Plural Sense:**

- Statistics are also aggregates of facts which are expressed in numerical form.

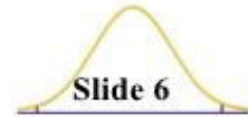
Example, Statistics on industrial production, statistics or population growth of a country in different years etc.

Meanings of Statistics

(2) **Singular Sense:**

- In singular sense, it refers to the science comprising methods which are used in collection, analysis, interpretation and presentation of numerical data.
- A device which is employed for the purpose of collection, classification, presentation, comparison and interpretation of data.

Definitions



❖ Statistics

a collection of methods for planning experiments, obtaining data, and then then organizing, summarizing, presenting, analyzing, interpreting, and drawing conclusions based on the data.

CHARACTERSTICS

- Aggregate of facts
- Numerically expressed
- Enumerated or estimated
- Reasonable Standard of Accuracy
- Collected in a systematic manner
- Predetermined purpose
- Capable of being placed in relation to each other



IMPORTANCE OF STATISTICS

- **Scope in Social Sciences.**
- **Scope for Education.**
- **Scope for solving the problems.**
- **Scope for commerce**
- **Scope for formulating the theories.**
- **Statistics and Business.**
- **Statistics and Mathematics**
- **Statistics and Economics.**
- **Statistics in Insurance.**
- **Statistics in Planning.**
- **Statistics and Econometrics**
- **Statistics and Physical and Natural Sciences**
- **Statistics and the State.**
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LIMITATIONS OF STATISTICS

1. *Study of Numerical Facts only*
2. *Study of Aggregates only*
3. *Not the only Method*
4. *Homogeneity of Data*
5. *Results are true only on an Average*
6. *Without Reference Results may Prove Wrong*
7. *Can be used only by Experts*
8. *Misuse of Statistics is Possible*
9. *Only Means and not a Solution*



Thank you







