

Topic: Meaning and types of Statistics

Unit-1

Paper - V (Statistics)

Class - B.A. III Psy (Hons)

A.P.S.M. College, Barauni.

Dr. Lav K. Singh

Important points

* ~~Sto~~ what is statistics?

Statistics is the science of collection, analysis, presentation and interpretation of data.

* ~~Open data~~ Currently the need to turn the large amounts of data available in many applied fields into useful information has stimulated both theoretical and practical developments in statistics.

* Data are the facts and figures that are collected, analyzed and summarized for presentation and interpretation.

* Data may be classified as either quantitative or qualitative.

* Quantitative data is used for measuring something in terms of numbers, i.e. how much or how many of something.

* While qualitative data includes labels, or names, or categories of similar items.

* 5000 male students, 400 female workers or number of universities in Bihar are examples of quantitative data.

* Whereas, Good-Bad, Male female, low-high etc are examples of qualitative data.

Types of statistics

* Statistics is mainly divided into two categories:-

1. Descriptive statistics
2. Inferential Statistics

* Descriptive Statistics -

In this type of statistics, data is described in a summarized way.

* The summarization is done from the sample of the population using different parameters like mean/standard deviation.

* Various charts, graphs, histograms, pie charts, bars or scatter plots are using in arranging and displaying in Descriptive Statistics.

* As name suggest, it is just descriptive, and thus do not require generalization beyond the data collected.

* Inferential Statistics

The meaning of descriptive Statistics is ~~tried~~ tried to interpret in the inferential statistics.

* ~~of~~ Inferential Statistics is used to describe the meaning of the collected data, after its analysis and summary.

* It uses the probability principle to assess whether trends contained in the sample can be generalized to the large population from which the sample originally comes.

* it is used to test hypotheses and investigate relationships between the variables.

* It is used to draw conclusions and inferences.