STATISTICS

Meaning of Statistics

DATA :-Information in the form of facts, numerical figure, table graphs which is collected with a definite purpose is called data

Data is the plural form of the Latin Word Datum.

To Extract meaningful information from data and utilise that data in one or the other form is very essential in our day to day lives.

Statistics: -

The extraction of meaningful information is studied in a branch of mathematics called Statistics deals with collection, organisation analyses and interpretation of data.

Some Terms Related to Statistics: -

- **Primary Data: -** The information collected by the investigator himself or herself with a definite purpose in his or her mind is called primary data.

- **Secondary Data: -** the information gathered form a source which already had the information stored is called secondary data.

- **Raw Data: -** the numerical data recorded in the original form as it is collected by the investigator or received form some source is called raw data.

- **Variables: -** A quantity which is being measured in an experiment is called a variable. Height, age and weight of people, number of member in a family, marks obtained by students in a test etc. are example of variables.

a) Continuous Variables: - A variable which can take any value between two given values is called a continuous variable.

E.g. Height age and weight of people are continuous variables.

b) Discontinuous (discrete variables): - A variable which cannot take all possible values between two given value is called a discontinuous or discrete variables.

- **Range: -** The difference between the maximum and minimum values of a variable is called its range.

- **Variable: -** a particular value of a variable is called variate (observation)

Frequency: - the number of times a variate (observation) occur in a given data is called frequency of the variate.

Frequency distribution: - A tabular arrangement of the given numerical data showing the frequency of different variate is called frequency distribution and the table itself is called frequency distribution table.

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