

NAZARETH COLLEGE OF ARTS AND SCIENCE

Affiliated to University of Madras

Re - accredited by NAAC with 'B' grade

DEPARTMENT OF MATHEMATICS

Name of the Faculty : B.Uma

Designation : Assistant Professor

**Subject : Statistical Methods & their
Applications I
Topic: Features of Statistics**

Meaning of Statistics

The word Statistics seems to have been derived from the Latin word 'status' or the Italian word 'statista' or the German word 'statistik' or the French word 'statistique' each of which means a political state.

Definition of Statistics

Statistics can be defined as the collection, presentation, analysis and interpretation of numerical data.- Croxton and Crowed.

Statistics are numerical statement of facts in any department of enquiry placed interrelation to each other.- A.L.Bowly.

Characteristics/ Features of Statistics

1.Statistics are Aggregate of facts/data.

statistics must consist of aggregate of facts. A single and isolated fact or figure like, 60 Kgs. weight of a student or the death of a particular person on a day does not have meaning in statistics. It must be in the form of a set or aggregate of facts. For example, weight of students in a class such as 50, 65, 70 Kgs.

2 It should be numerically expressed.

Statistics deals with numbers and is quantitative, so that counting or measurement of data can be made possible. It means that the data or the fact must be capable of being expressed in some quantitative form such as weights of 60, 70, 100 and 90 Kg. or profits of Rs. 10,000, Rs. 20,000 etc. Thus these data must contain numerical figures so that those may be called as numerical statement of facts.

3 It is affected by different factors.

It is not easy to study the effects of one factor by ignoring the effects of other factors. Because effects of the factors can change with change of place, time or situation. Here, the overall effect is taken.

4 It must be enumerated or estimated accurately.

For getting reasonable standard of accuracy the field of enquiry should not be very large. If it is infinite, even enumeration of data is impossible. Hence the standard of accuracy depends upon the nature and purpose of an investigation, its nature, size and available resources.

5. It should be collected for a predetermined purpose.

Before we start the collection of data, we must be clear with the purpose for which we are collecting the data. If we have no information about its purpose, we may not be able to collect the data according to the needs.

For example, if we want to get data on imports and exports, we have to know about various segments such as electronics, consumer articles, grains and such other segregations also.

6. It should be collected in a systematic manner.

The data should be collected in a systematic manner. If it is not done, in such cases reliability of data gets decreased. So to get correct results the data must be collected in a precise manner.

7. It should be comparable.

The collection of data is generally done with the motive to compare. If the figures collected are not comparable, in that case, they lose a large part of their significance.