

Statistics

★ What is statistics ?

Statistics may be defined as the collection, presentation, analysis and interpretation of numerical data.

Statistics is a set of decision-making techniques which helps businessman needs a sound in making suitable policies from the available data. In fact, every businessman needs a sound background of statistics as well as of mathematics.

The purpose of statistics and mathematics is to manipulate, summarize and investigate data so that the useful decision-making results can be created.

★ Meaning :

The term 'statistics' has been derived from the Latin word 'status' Italian word 'statista' or German word 'statistik'.

All these words mean 'Political state'. In ancient days, the states were required to collect statistical data mainly for the number of youngmen so, that they can be recruited in the army.

* Definition :

"Statistics are numerical statement of facts in any department of enquiry placed in relation to each other." - Bowley

"Statistics may be defined as the collection, presentation, analysis and interpretation of numerical data" - Croxton and Cowden

* Importance of Statistics :

The importance of statistics in the following major areas :

1. Importance of statistics in Business and Industry :

In past days, decision regarding business were made only on personal judgement. However, in these days, they are based on several mathematical and statistical techniques and the best decision is arrived by using all these techniques.

For example, by using the testing of hypothesis, we can reject or accept the null hypothesis which are based upon assumption made from the population or universe.

2. Imp. in the Field of Science and Research:

Statistics has great significance in the field of physical and natural sciences. It is widely used in verifying scientific laws and phenomenon.

For example, to formulate standards of body temperature, pulse rate, blood pressure, etc. The success of modern computers depends on the conclusions drawn on the basis of statistics.

3. Imp. in the Field of Banking:

In banking industry, the bankers have to relate demand deposits, time deposits, credit etc. It is on the basis of all data relating to demand and time deposits that the bankers determine the credit policies. The credit policies are based on the theory of probability.

4. Importance to the State:

We know that the subject of statistics originated for helping the ancient rulers in the assessment of their military and economic strength. Gradually its scope was

enlarged to tackle other problems relating to political activities of the state.

5. Importance in planning :

Planning is indispensable for achieving faster rate of growth through the best use of a nation's resources. It also requires a good deal of statistical data on various aspects of the economy.

One of the aims of planning could be to achieve a specified rate of growth of the economy. Using statistical techniques, it is possible to assess the amounts of various resources available in the economy and accordingly determine whether the specified rate of growth is sustainable or not.