DEFINITION OF STATISTICS:

For BA: Part III

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

2. Statistics are numerical statement of facts in any department of enquiry placed interrelation to each other.- Bouly.

3. Statistics are measurement, enumerations or estimates of natural or social phenomena systematically arrangement to exhibit their inner relation.- Conner.

4. By Statistics we mean quantitative data affected to a marked extend by a multiplicity of causes. – Youle and Kendal.

5. The science of Statistics is essentially a branch of applied mathematics and can be regarded as a mathematics applied to observation data.- R.A fisher.

SCOPE AND IMPORTANCE OF STATISTICS:

➢ *Statistics and planning:* Statistics in indispensable into planning in the modern age which is termed as "the age of planning". Almost all over the world the govt. are re-storing to planning for economic development.

➢ *Statistics and economics:* Statistical data and techniques of statistical analysis have to immensely useful involving economical problem. Such as wages, price, time series analysis, demand analysis.

➢ *Statistics and business:* Statistics is an irresponsible tool of production control. Business executive are relying more and more on statistical techniques for studying the much and desire of the valued customers.

➢ *Statistics and industry:* In industry statistics is widely used inequality control. In production engineering to find out whether the product is confirming to the specifications or not. Statistical tools, such as inspection plan, control chart etc.

➢ *Statistics and mathematics:* Statistics are intimately related recent advancements in statistical technique are the outcome of wide applications of mathematics.

➢ *Statistics and modern science:* In medical science the statistical tools for collection, presentation and analysis of observed facts relating to causes and incidence of dieses and the result of application various drugs and medicine are of great importance.

➢ *Statistics, psychology and education:* In education and physiology statistics has found wide application such as, determining or to determine the reliability and validity to a test, factor analysis etc.

➢ Statistics *and war:* In war the theory of decision function can be a great assistance to the military and personal to plan "maximum destruction with minimum effort."

STATISTICS IN ECONOMICS:

1. ***Marketing****:* Statistical analysis are frequently used in providing information for making decision in the field of marketing it is necessary first to find out what can be sold and the to evolve suitable strategy, so that the goods which to the ultimate consumer. A skill full analysis of data on production purchasing power, man power, habits of compotators, habits of consumer, transportation cost should be consider to take any attempt to establish   a   new   market.

2. ***Production*****:** In the field of production statistical data and method play a very important role. The decision about what to produce? How to produce?

When to produce? For whom to produce is based largely on statistical analysis.

3. *Finance:* The financial organization discharging their finance function effectively depend very heavily on statistical analysis of peat and tigers.

3. *Banking***:** Banking institute have found if increasingly to establish research department within their organization for the purpose of gathering and analysis information, not only regarding their own business but also regarding general economic situation and every segment of business in which they may have interest.

4. *Investment***:** Statistics greatly assists investors in making clear and valued judgment in his investment decision in selecting securities which are safe and have the best prospects of yielding a good income.

5. *Purchase:* the purchase department in discharging their function makes use of statistical data to frame suitable purchase policies such as what to buy? What quantity to buy? What time to buy? Where to buy? Whom to buy?

6. *Accounting:* statistical data are also employer in accounting particularly in auditing function, the technique of sampling and destination is frequently used.

7. *Control:* the management control process combines statistical and accounting method in making the overall budget for the coming year including sales, materials, labor and other costs and net profits and capital requirement.