



QUANTITATIVE METHODS

MODULE CODE: BIT 125



WELCOME



DEEPAK BASTOLA

LECTURER

TEXAS COLLEGE MANAGEMENT AND IT

COURSE CONTENTS



CHAPTER 01

NATURE AND SCOPE OF STATISTICS

- ☐ Definitions of statistics
- ☐ Descriptive and inferential statistics
- ☐ Scope of statistics
- ☐ Limitations and distrusts of statistics

3 Lecture Hours

SCOPE OF STATISTICS



- Statistics being indispensable in the modern world has been of utmost use to the government as they are using statistics constantly researching to improve the economic development of countries.
- Statistics in the industry are widely used for quality control.
- In education also statistics are widely used because now research has become a common feature in all branches of activities and studies.
- In the field of Medical sciences too statistical tools play a very vital role, for example, it is used to test the efficiency of a new drug or medicine.
- Simplifying complex data
- Discovers past and emerging patterns in a data. It helps in forecasting
- Helps in estimation and validating assumptions

SCOPE OF STATISTICS IN VARIOUS DISCIPLINE



1. **Statistics and planning:** Statistics is indispensable in planning in the modern age which is termed as “the age of planning”. Almost all over the world the governments are resorting to planning for economic development.
2. **Statistics and economics:** Statistical data and techniques of statistical analysis have become immensely useful in solving economical problems. Such as wages, price, time series analysis, demand analysis.
3. **Statistics and business:** Statistics is an indispensable tool of production control. Business executives are relying more and more on statistical techniques for studying the wants and desires of the valued customers.
4. **Statistics and mathematics:** Statistics are intimately related. Recent advancements in statistical techniques are the outcome of wide applications of mathematics.

SCOPE OF STATISTICS IN VARIOUS DISCIPLINE



5. 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.
6. Statistics and modern science: In medical science the statistical tools for collection, presentation and analysis of observed facts relating to causes and incidence of diseases and the result of application various drugs and medicine are of great importance.
7. 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.

LIMITATION OF STATISTICS



- It does not deal with individual measurements
- It deals with quantitative characteristics
- Statistical results are true only on an average
- It has too many methods to study a problem
- It is a lengthy process and result may mislead

THANK YOU !

