



# STATISTICS AND BUSINESS MATHEMATICS

B.COM. SEMESTER II

**Dr. Mahendra Laxmanrao Vanjari**  
Assistant Professor  
Dada Ramchand Bakharu Sindhu  
Mahavidyalaya, Nagpur

# What is Statistics ?

## DEFINATIONS of STATISTICS in PLEURAL SENSE:

1. **According to Webster-** “Classified facts, representating the condition of the people in a state, specially those facts which can be started in number or in tables of number or in any tabular or classified arrangement.”
2. **According to A. L. Bowley-** “statistics are numerical statement of facts in any department of enquiry placed in relation to each other.”
3. **According to Yule & Kendall-** “By statistics we mean quantitative data affected to a mark extend by multiplicity of causes.”

## NEW DIMENSION IN THE DEFINATION OF STATISTICS:

1. According to **Anderson and Baneraft** : “Statistics is the science and art of the development and application of the most effective methods of collecting, tabulating and interpreting quantative data in such a manner that the fallibility of conclusion and in estimates may be assessed by means of inductive reasoning based on mathematics probability.”
2. According to **Kaney and Keeping** : “Statisticals has usual meant the science and art conquered with the collection, presentation and analysis of quantitative data so that intrlligent judgement may be made upon them.”
3. According to **Panden and Lindquist** : “Statistical methods are mathematical techniques used to falicitate the interpretation of numerical data secured from groups of indivisuals.”

# FUNCTIONS OF STATISTICS

- **To simplify the complex facts**
- **To make Comparison of Facts**
- **To study Relationship Between Different Facts**
- **To Formulate Policies**
- **To Enlarge Individuals Knowledge and Experience**
- **To make Predictions and Forecasting**
- **To Measure the Effects of Different Policies**
- **To Test the Hypothesis**

# LIMITATIONS OF STATISTICS

- **Statistics Deals only with Quantitative Aspects of a Problem**
- **Statistics does not Deal with Individual Measurements**
- **Statistical Results are True only on Averages**
- **Statistical Data are only Raw Materials**
- **Statistics can be Misused**

# SCOPE/IMPORTANCE/ ADVANTAGES/USEFULLNESS OF STATISTICS

- **Planning**
- **Administration**
- **Education**
- **Agriculture**
- **Trade and Business**
- **Complex Problem**
- **Comparison**
- **Economics**
- **Taxation**
- **Commerce**
- **Improvement in Knowledge**
- **Simplification of information**
- **To know unknown information**
- **Helpful for policy**
- **To know facts**
- **Guidance and Suggestions**