

Statistical Methods: (BAGS 0113)

Lecture 1

GLA University Mathura

Dr. Manoj Kumar

Outline of Lecture 1

Introduction to Statistics

Definition of Statistics

Applications of Statistics in Agriculture

Some multiple choice questions

References

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Definition o Statistics

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The word "Statistics "is derived from the Latin word "status" or the Italian word "statista" or the German word "statistik" which means a "political state."

The word statistics has several meanings. In the first place, it is a plural noun which describes a collection of numerical data such as employment statistics, accident statistics, population statistics, birth and death, income and expenditure, of exports and imports etc. It is in this sense that the word 'statistics'is used by a layman or a newspaper.



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The word "statistics" in the first sense is defined by Professor Secrit as follows:

"By statistics we mean aggregate of facts affected to a marked extent by multiplicity of causes, numerically expressed, enumerated or estimated according to reasonable standard of accuracy, collected in a systematic manner for a predetermined purpose and placed in relation to each other."



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The word "statistics" in the second sense is defined by Croxton and Cowden as follows: "The collection, presentation, analysis and interpretation of the numerical data."

This definition clearly points out four stages in a statistical investigation, namely:

1) Collection of data 2) Presentation of data

3) Analysis of data 4) Interpretation of data



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1. Statistics is the Science of estimates and probabilities, By Boddington.

2. Statistics may be called the Science of counting, By Bowley.

3. Statistics may rightly be called the Science of averages, By Bowley.



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Some multiple choice questions References In the modern world of computers and information technology, the importance of statistics is very well recognized by all the disciplines. Statistics has originated as a science of statehood and found applications slowly and steadily in Agriculture, Economics, Commerce, Biology, Medicine, Industry, Planning, Education and so on. As on date there is no other human walk of life, where statistics can not be applied.

For example: What amount of crops are grown this year in camparison to previous year.



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Multiple choice Questions

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Q.N.1. Which of the following statements about Statistics is not correct ?

a. Statistics is sometimes misused by statisticians.

- b. Statistics has hardly any limitations.
- c. Statistics is indispensable in the management of business enterprises.
- d. Statistics is of two types: descriptive and inferential.

Q.N.2. Which of the following statements describes "Statistics" most appropriately ?

- a. Statistics is the science of counting.
- b. Statistics is the science of averages.
- c. Statistics is concerned with the collection, presentation and analysis of data leading to valid conclusions.
- d. Statistics is the aggregate of facts.

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Multiple choice Questions

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- Q.N.3. Which of the following statements is not true ?
- a. Statistics deals with quantitative data.
- b. Statistics deals with qualitative data.
- c. Statistics deals with both quantitative and qualitative data.
- d. Statistics does not cover graphical devices.

- A (B) A



bibliography

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