04/11/2023

Ref: 1) Goon, Gupta, Dasgupta: Fundamental Statistics

2) N.G. Das: Basic Staistics

3) Gupta Kapoor

- Definitions, Functions of Statistics, Limitation of Statistics, Applications of Statistics

Definition: A <u>numerical tool</u> used in various fields to <u>represent</u> some incidents and suitably <u>gives insights</u> of the actual reason behind.

Two senses in which "Statistics" is defined:
1) Set of data (primary, secondary & tertiary)
2) Subject

Example 1:
What are the two senses in which the term Statistics is generally used?

Functions:
1) Analysis – Socio-economic, Scientific, Temporal (time), Spatial (space/place: Cross-sectional data)
2) Representation:
3) Comparison

Limitations:
1) Variable – Parameter & Attributes / <u>Quantitative</u> & <mark>Qualitative</mark> (Dummy Variable)
2) Comprehensiveness of data

Person 1	Rs. 2000
Person 2	Rs. 2500
Person 3	Rs. 1500
Person 4	Rs. 60000
Person 5	Rs. 1000
Total/ Sum	Rs.10000
Average Income	Rs. 67000/5= Rs. 33500/-

- Collection of Data: Types and Methods

Data Type	Method of Collection

Primary Data	Direct collection on the field / Field Survey
	    1) NSSO: National Sample Survey Organisation
	    2) Census

Secondary Data	Reports, Journals, Newspapers, Newsletters - Database

- Classification and Presentation of data: Pie Diagram, Bar Diagram, Histogram, Frequency Curve, Frequency Polygon, Ogive