Subject Name: Elements of Statistics Subject Code: BCA 3005 Topic: Collection of Data

By

Dr. RITESH AGRWAL Department of Computer Application UIET, CSJM University, Kanpur 1. Collection of Data:

Collection of data is the first step in any statistical investigation of a phenomenon we cannot come to any conclusion if the collection of data is not proper.

Before collecting the data the following situations may exist

- 1. The data are available within the agency
- 2. Data are available from some other sources outside the agency

3. The data do not exist and must be collected by the investigator

The types and sources of data are discussed below

1. **Primary data:** primary data are based on primary sources of information these are collected by investigator. Either on his own or through some agency set up for the purpose

in other words, we can say that investigator gets them in original or raw state and it is used with greater confidence

The following are the method of collecting primary data number first direct personal interviews observation

- (i) Indirect personal interview
- (ii) Mailed questionnaires
- (iii) Information through local sources or correspondents

2. **Secondary data:** Secondary data based on secondary sources of information. The sources of data is called secondary, if the data have already been collected, tabulated and presented Data may be primary for one agency may be secondary for the other and vice versa.

The sources of secondary data classified into two part

- (i). Public sources
- (ii). Unpublished sources
- (i) Public sources: some of the published sources
- (a) Government Publication
- (b) International Publication
- (c) Private Publications
- (d) Journals and Newspaper
- (e) Reports of committees and commissions
- (f) Research Publication
- (g) Articles

(ii) Unpublished sources: In some cases data are collected but these are not put in published form, i.e., research scholar in the university, trade association etc

Classification:

Classification is defined as the process of arranging the collected data into homogeneous class so as its common characteristics

According to Secrist, "Classification is the process of arranging data into sequence and groups according to the common characteristics or separating them into different but related parts Example Letters in the post office are classified according to their destinations viz Delhi, Jaipur, Agra, Kanpur etc

Objects of classification

The following are the main objectives in an easily assimilable form

- (i) It eliminates unnecessary details
- (ii) It help in comparative study
- (iii) It helps in clearing find the point of similarities and dissimilarities
- (iv) The mass of data in an easily assemble form
- (v) It helps in statistical treatment of the information collected

Referential Books

1. S. C. Gupta and V. K. Kapoor – Fundamentals of Statistics – Sultan chand & sons, Delhi.

2. H.K. Dass – Advanced Engineering Mathematics – S. chand & Co., 9th Revised Ed.

3. J. K. Goyal and J. N. Sharma – Mathematical Statistics – Krishna publication (p) ltd