**TUTORIAL WEEK 1**

1. A manager of a firm wishes to estimate the average number of medical leave taken by the employees. The firm has five branches with 1,500 employees located throughout the country. To carry out the study, the manager selects at random a total of 500 employees representing all branches proportionately.
2. State the population of the study.

* 1,500 employees located throughout the country.

1. State the sample and sampling frame of the study.

Sample of the study - 500 employees representing all branches proportionately.

Sampling frame of the study - List of all employees representing all branches proportionately.

1. State the variable of interest and type of the variable for the above study.

variable of interest - the average number of medical leave taken by the employees

type of the variable - discrete quantitative

1. For the following data determine whether each of the following variables is qualitative, discrete quantitative, or continuous quantitative:
2. Monthly electricity bill for a household with 4 occupants.

* Discrete quantitative

1. Types of personal loans offered by a leading bank.

* Qualitative

1. The percentage of traffic monitoring coverage on highways in the country.

* Continuous quantitative

1. Ethnicity group of secondary school children.

* Qualitative

1. Classify each of the following responses by type of data (qualitative, discrete quantitative, or continuous quantitative) and type of measurement scale (nominal, ordinal, interval, or ratio):
2. Type of house purchased: Double-storey terrace

* Qualitative (nominal)

1. Built-up area: 3,231 square feet

* Continuous quantitative (ratio)

1. Down payment paid for the house: RM 20,000

* Discrete quantitative (ratio)

1. Monthly payment paid for the house: RM 880

* Discrete quantitative (ratio)

1. Annual interest rate charged: 4 ½%

* Continuous quantitative (ratio)

1. Marital status: Married

* Qualitative (nominal)

1. Occupation: Lecturer

* Qualitative (nominal)

1. Monthly salary: RM 2,500

* Discrete quantitative (ratio)

1. Term of payment: 25 years

* Discrete quantitative (ratio)

1. Date of purchase: 25 August 2003

* Discrete quantitative (ratio)

1. Temperature: 1000 C (boiling point)

* Continuous quantitative (interval)

1. Army ranks: Colonel ; Major ; Captain ; Lieutenant

* Qualitative (ordinal)

1. Salary group: A ; B ; C ; D

* Qualitative (nominal)