Assignment 3

Q. What is Qualitative data?

→ Qualitative data is defined as the data that approximates and characterizes.

Qualitative data can be observed and recorded. This data type is

non-numerical in nature. This type of data is collected through methods

of observations, one-to-one interviews, conducting focus groups, and

similar methods. Qualitative data in statistics is also known as categorical

data – data that can be arranged categorically based on the attributes and

properties of a thing or a phenomenon.

For example, think of a student reading a paragraph from a book during one of the class sessions. A teacher who is listening to the reading gives feedback on how the child read that paragraph. If the teacher gives feedback based on fluency, intonation, throw of words, clarity in pronunciation without giving a grade to the child, this is considered as an example of qualitative data.

Q. What is Quantitative Data?

→ Quantitative data is defined as the value of data in the form of counts or numbers where each data-set has an unique numerical value associated with it. This data is any quantifiable information that can be used for mathematical calculations and statistical analysis, such that real-life decisions can be made based on these mathematical derivations.

Quantitative data is used to answer questions such as "How many?", "How often?", "How much?". This data can be verified and can also be conveniently evaluated using mathematical techniques.

For example, there are quantities corresponding to various parameters, for instance, "How much did that laptop cost?" is a question which will collect quantitative data. There are values associated with most measuring parameters such as pounds or kilograms for weight, dollars for cost etc.

Q. What are methods of data collections? Describe them in detail.

→ Data is a collection of facts, figures, objects, symbols, and events gathered from different sources. Organizations collect data to make better decisions. Without data, it would be difficult for organizations to make appropriate decisions, and so data is collected at various points in time from different audiences. For instance, before launching a new product, an organization needs to collect data on product demand, customer preferences, competitors, etc. In case data is not collected beforehand, the organization's newly

launched product may lead to failure for many reasons, such as less demand and inability to meet customer needs.

Quantitative Methods:

Quantitative techniques for market research and demand forecasting usually make use of statistical tools. In these techniques, demand is forecast based on historical data. These methods of primary data collection are generally used to make long-term forecasts. Statistical methods are highly reliable as the element of subjectivity is minimum in these methods.

Qualitative Methods:

Qualitative methods are especially useful in situations when historical data is not available. Or there is no need for numbers or mathematical calculations. Qualitative research is closely associated with words, sounds, feeling, emotions, colors, and other elements that are non-quantifiable. These techniques are based on experience, judgment, intuition, conjecture, emotion, etc.

- Q. How will you gather information for problems that you defined earlier.
- → In my case I will carry out the data by man to man question answering.

- → I will ask the question to students.
- → I have readed articles and news.
- → I will open my own sight to check what people need.
- → And I will gather all the data I required to resolve the problems.