

Q1.Differentiate between Data and Information?

Ans. Data. Data is a collection of raw, unorganized facts and details like text, observations, figures, symbols and descriptions of things etc.

Data is measured in terms of bits and bytes – which are basic units of information in the context of computer storage and processing.

Information. Information is processed, organized and structured data.

It provides context for data and enables decision making.

Q2.How Data is useful for us?

Ans. Data improves human's life.

Customer acquisition and retention.

Cost optimization.

Describing, Diagnosing, Predicting, Prescribing.

Q3.What is Big Data?

Ans. Big Data is a collection of data that is huge in volume, yet growing exponentially with time.

It is a data with so large size and complexity that none of traditional data management tools can store it or process it efficiently.

Big data is also data but with huge size.

Q4.What is Structured, Semi Structured and Unstructured Data?

Ans. Structured. Structured data is data whose elements are addressable for effective analysis. It has been organized into a formatted repository that is typically a database. It concerns all data which can be stored in database SQL in a table with rows and columns
Example: Relational data.

Unstructured. Unstructured data is a data which is not organized in a predefined manner or does not have a predefined data model, thus it is not a good fit for a mainstream relational database.
Example: Word, PDF, Text, Media logs.

Semistructured. Semi-structured data is information that does not reside in a relational database but that has some organizational properties that make it easier to analyze.
Example: XML data.

Q5.What are Quantitative and Qualitative data?

Ans. Quantitative. Data are measures of values or counts and are expressed as numbers.

Quantitative data are data about numeric variables (e.g. how many; how much; or how often).

Qualitative. Data are measures of 'types' and may be represented by a name, symbol, or a number code.

Qualitative data are data about categorical variables (e.g. what type).

Q6.Different V's in Big Data?

Ans. 1. Variety

2. Volume

3. Value

4. Veracity

5. Velocity

Q7.Some popular tools Used in Big data?

Ans. Apache Hadoop

Apache Spark

Google Cloud Platform

Mongo db

Rapidminer etc.

Q7.What are different types of data?

Ans. Qualitative: Nominal data and Ordinal data.

Quantitative. Discrete data and Continuous data.