BIG DATA ANALYTICS

Big Data Analytics

- ✓Big Data Analytics (BDA) refers to the process of examining and analyzing complex data sets to extract insights and patterns.
- ✓ It involves using various tools and techniques to collect, process, and interpret large data volumes from various sources, such as sensors, social media, and databases.
- ✓The basics of BDA include data ingestion, data storage, data processing, and data visualization.
- ✓Key players in BDA include Apache Hadoop, Apache Spark, and NoSQL databases.

Big Data Analytics

✓BDA is commonly used in industries such as

Finance, Healthcare, Marketing, and Retail to gain business intelligence, optimize operations, and make data-driven decisions.

Why Big Data Analytics Is Important

- ✓Cutting Costs
- ✓Making Faster And Better Decisions
- ✓Creating and Marketing New Products and Services

Types of Big Data Analytics

- ✓**Descriptive analytics -** Focuses on summarizing and interpreting historical data to identify patterns, trends, and insights.

  It helps organizations understand what has happened in the past by analyzing large sets of data and presenting the findings in an easily understandable format, such as charts, graphs, and reports.

- ✓**Diagnostic Analytics -** Diagnostic analytics delves into why it happened. It seeks to identify the causes and underlying factors behind historical trends and outcomes**.**

Types of Big Data Analytics

- ✓**Predictive Analytics -** Uses historical data, statistical algorithms, and machine learning techniques to forecast future events, trends, and behaviors.

  It aims to provide actionable insights by predicting what is likely to happen in the future based on past data**.**

- ✓**Prescriptive Analytics** It not only forecasts future outcomes but also recommends actions to achieve desired results or mitigate risks. Prescriptive analytics helps organizations determine the best course of action by considering various possible scenarios and outcomes.

Information and Communications Technology

✓There are five v's of Big Data that explains the characteristics.