

NAME :

ROLL NO :

Why Big Data Analytics:

Big Data Analytics is essential for deriving valuable insights from vast and complex data sets, aiding informed decision-making, improving operational efficiency, and gaining a competitive edge.

What is Big Data Analytics:

Big Data Analytics involves the analysis of large and diverse data sets to uncover patterns, trends, and insights that can be utilized for business intelligence, strategic planning, and problem-solving.

Different Stages in Big Data Analytics:

The stages in Big Data Analytics typically include data acquisition, data storage, data processing, data analysis, and insights generation, followed by actionable decision-making.

Different Types of Big Data Analytics:

Big Data Analytics encompasses descriptive analytics (summarizing data), diagnostic analytics (identifying trends), predictive analytics (forecasting), and prescriptive analytics (suggesting actions).

Tools used in Big Data Analytics:

Tools such as Hadoop, Spark, Apache Flink, Tableau, Python, R, and various machine learning frameworks are widely used in Big Data Analytics for data processing, analysis, and visualization.

Big Data Analytics in Different Domains:

Big Data Analytics finds applications in diverse domains, including healthcare (patient analytics), finance (fraud detection), retail (customer analytics), marketing (campaign optimization), and manufacturing (predictive maintenance).

Trends in Big Data Analytics:

Current trends in Big Data Analytics include increased adoption of artificial intelligence (AI) and machine learning, edge computing for real-time analysis, privacy and ethics considerations, and the integration of Big Data Analytics with the Internet of Things (IoT).