1. What is data analytics and why is it important? Data Analytics involve using some set of techniques or Tools to extract meaningful information from Raw data

Data analytics is Important because

1. it involve Decision making : Business make informed decision on insight derive from data rather then guess work,

II. Identify Opportunity and Trend :it enable business to identify new opportunity market trend and customer reference

2 **What are the different types of data analytics?**

1. Descriptive Analytic
2. Diagnostics analytics
3. Predictive Analytics
4. Prescriptive Analytics

3 **How does data analytics differ from data science?**

I Data analytics focus on analyzing current and Past insights that informed decision making and solve specific business problem

II. Data science has a broad focus that encopassing not onle analyzing data but also involve extracting data through various process

Iii. Data Analytics rely on tools like like Excel, SQL And some basic Visualisation soft ware

Iv. Data Science make use of some tools and techniques like Python, R machine language and data mining techniques to analyze structure and un structured Data

1. **What are the key components of a data analytics process?**
2. Data Collection
3. Data preparation
4. Data Analysing
5. Data Interpretation
6. Decision making
7. **What are some common tools and techniques used in data analytics?**
8. SQL, Power BI, Tablue, spss,Excel
9. **How is data analytics used in business decision-making?**
10. Conducting a survey to understand customer behaviour
11. Forcasting and planning
12. Risk Management
13. Strategic decision making

7**. What are some real-world examples of data analytics being used to solve problems or make**

**predictions?**

I . in a logistic company , the manager has several pick up Van and want to know which one should be assign to which Location

1. In an Hospital sector Management want to know the number of In and Out patient , number of malaria patient, number of register birth etc
2. In sales Management want to forcast the peak season for some product

8 **What are the potential challenges and limitations of data analytics?**

1. Data quality issue , such has in accuracy, in completeness and inconsistencies
2. Bias and interpretation error
3. Complexity of Data
4. **How is data analytics used in different industries, such as healthcare, finance, and marketing?**
5. Data analytics is used in finance sector to assess and Manage risk , such as credit default
6. Data Analytics is used in Health sector to determine Predictive analysis for disease to determine individual that has high risk of developing certain Disease.
7. Data Analytics in marketing to improve customer engagement and targeting personalization

10. **What are the ethical considerations and privacy concerns related to data analytics?**

I. Data privacy due to mis used of data .

Deadline:

29th of March, 2024