1. What is the primary goal of data analytics?

- a) To collect data
- b) To clean data
- c) To extract meaningful insights from data
- d) To store data

2. Which of the following is a common technique used in data analytics?

- a) Data mining
- b) Data visualization
- c) Statistical analysis
- d) All of the above

3. What does the term 'big data' refer to?

- a) Data that is too large to be processed by traditional data processing tools
- b) Data that is stored in large databases
- c) Data that is collected from big organizations
- d) Data that is collected from social media platforms

4. Which of the following is NOT a type of data analysis?

- a) Descriptive analysis
- b) Predictive analysis
- c) Prescriptive analysis
- d) Regressive analysis

5. What is the purpose of data visualization in data analytics?

- a) To store data
- b) To clean data
- c) To present data in a graphical format for easier interpretation
- d) To collect data

6. Which of the following is a common data visualization tool?

- a) Microsoft Excel
- b) Tableau
- c) Power BI
- d) All of the above

7. What is the first step in the data analytics process?

- a) Data cleaning
- b) Data collection
- c) Data visualization
- d) Data interpretation

8. Which of the following is a common challenge in data analytics?

- a) Data privacy concerns
- b) Data inconsistency
- c) Data overload
- d) All of the above

9. What is the purpose of data cleaning in data analytics?

- a) To remove irrelevant data
- b) To correct errors in the data
- c) To handle missing data
- d) All of the above

10. Which of the following is a key component of data analytics?

- a) Data collection
- b) Data cleaning
- c) Data analysis
- d) All of the above

11. What is the difference between mean and median?

- A. Mean is the middle value; median is the average.
- B. Mean is the average; median is the middle value.
- C. Both represent the average.
- D. Mean and median are used interchangeably.

12. What does the term "outlier" mean in data analysis?

- A. The most common value in a dataset
- B. Unusual or extreme values in a dataset
- C. The difference between mean and median
- D. The last value in a sorted dataset

13. How is the range of a dataset calculated?

- A. The difference between the largest and smallest values
- B. The sum of all values
- C. The product of all values
- D. The average of all values

14. What is the significance of the term "standard deviation"?

- A. Measuring central tendency
- B. Describing the spread or dispersion of data
- C. Identifying the most frequent value
- D. Representing the range of values

15. CASE STUDY

Uber Surge Pricing

Uber employs data analytics to implement surge pricing, adjusting fares based on demand and supply in real-time. This dynamic pricing strategy ensures efficient service delivery and maximizes revenue. This case study showcases the use of data analytics in the transportation industry.