

**BCM SCHOOL BASANT AVENUE DUGRI LUDHIANA**

**SUBJECT :ARTIFICIAL INTELLIGENCE**

**CLASS IX**

**Multiple Choice Questions:**

1. Which of the following describes the process of transforming raw data into useful information?

- (a) Data encryption
- (c) Data processing
- (b) Data aggregation
- (d) Data storage

2. In the context of the DIKW Model, which stage involves deriving actionable insights from processed information?

- (a) Wisdom
- (b) Knowledge
- (c) Information
- (d) Data

3. Which aspect of data security involves confirming the identity of users trying to access data?

- (a) Data encryption
- (b) Access controls
- (c) Authentication
- (d) Data masking

4. What is one advantage of using a data dashboard for tracking progress?

- (a) It ensures data accuracy
- (b) It saves time by consolidating information
- (c) It requires manual updates
- (d) It increases data complexity

5. Which type of data is used to specify the taste of sugar?

- (a) Qualitative
- (b) discrete
- c)Quantitative
- d)Continuous

### Fill in the blanks

1. One key aspect of data security is \_\_\_\_\_, which transforms data into a coded format to prevent unauthorized access.
2. The DIKW Model represents the relationship between data, information, \_\_\_\_\_ and wisdom
3. Excel is primarily known as spreadsheet software, but it is also a powerful tool for \_\_\_\_\_ data.
4. \_\_\_\_\_ data can be subdivided into smaller parts according to the measurement precision.
5. A data dashboard helps you see and understand key information quickly by using visuals like \_\_\_\_\_ and \_\_\_\_\_

### State Whether the given statement are True or False

1. Excel is primarily a data visualization tool designed for creating interactive dashboards.
2. A bar chart can be used to show sales trends over a period of time.
3. Discrete data can take any value in a range
4. Data presentation should focus on accuracy and relevance to make the information actionable.
5. Kaggle assigns a usability score to the data sets that are present on the website based on scores given by the users of that data

### Match the following

|                          |                                                                                                                                             |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| 1.Data Discovery         | [a] creating new data artificially ,often using algorithms or models, to simulate real-world scenarios or to fill gaps in existing datasets |
| 2. Data Augmentation     | [b] Data collected first-hand for a specific purpose by the researcher or organization                                                      |
| 3. Data Generation       | [c] Data collected by someone else for a different purpose but used by another party.                                                       |
| 4. Primary Data Source   | [d] Process of enhancing existing data by adding new information or modifying it to improve its quality and usefulness.                     |
| 5. Secondary Data Source | [e] Involves finding and identifying relevant data from various sources to use for analysis.                                                |

1. Assertion (A): Data visualization is the representation of data or information in a graph, chart, or other Reason(R): Data visualization does not help to see and understand trends and outliers

(a) Both A and R are true and R is the correct explanation of A

(b) Both A and R are true but R is not the correct explanation of A

(c) A is true but R is false.

(d) A is false but R is true.

2. Assertion (A): Data is a powerful tool.

Reason (R): Data is present everywhere, it should be properly reviewed and analyzed accurately.

(a) Both A and R are true and R is the correct explanation of A.

(b) Both A and R are true but R is not the correct explanation of A.

(c) A is true but R is false.

(d) A is false but R is true.

### **Very Short Answer Type Questions:**

1. How can data literacy impact decision-making?
2. What is a key purpose of using data dashboards?
3. What are three different ways of data representation?
4. Give five examples of Continuous data around you.
5. Which type of data best represents the time displayed on a clock? Explain.

### **Short Answer Type Questions**

1. How does data security differ from data privacy?
2. What does Tableau Public offer that Tableau Desktop does not?
3. Why is visual appeal important in data presentation?
4. Explain Data Processing with example.
5. What is Web Scraping?

### **Long Answer Type Questions**

1. What are the best practices for acquiring data?

2. What are Data Features? Explain the two primary categories of features in data analysis and machine learning.
3. What are different data collection methods for Quantitative Data Interpretation?