

DWD Final Assessment

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Score Obtained: RETAKE (/PACKAGE-COST-DETAILS/#) **48/50 (96%)** [VIEW REPORT](#)

Data Analysis is a process of?

- inspecting data 1/1 ATTEMPTED
- cleaning data
- transforming data
- All of the above

2.

Which of the following is a kind of data?

- Text 1/1 ATTEMPTED
- Numbers
- Media
- All of these

3.

Data science is the process of diverse set of data through ?

1/1 ATTEMPTED

- organizing data
- processing data
- analyzing data
- All of the above

4.

Who is a data scientist?

- Statistician
- Mathematician
- Software programmer
- All of the above

1/1

ATTEMPTED

5. Which of the following is a powerful python library for data manipulation and analysis, particularly for working with structured data? 1/1

ATTEMPTED

- Springboot
- Pandas
- Matplotlib
- Seaborn

6.

Which of the tools are Data Science Tools used by Data Scientists to carry out their data operations?

Apache Spark

1/1

ATTEMPTED

Excel

Both A and B

Ruby

7.

Which of the following is performed by Data Scientist?

Define the question

1/1

ATTEMPTED

Create reproducible code

Challenge results

All of the mentioned

8.

Which of the following is the most important language for Data Science?

Java

1/1

ATTEMPTED

Ruby

R

None of the mentioned

9. Which of the following is data that is partially structured, often with tags or elements that separate the data?

1/1

ATTEMPTED

- Structured
- Unstructured
- Semi Structured
- All of the above

10. What is the primary goal of data analytics?

1/1

ATTEMPTED

- Storing data
- Extracting insights and patterns
- Creating data backups
- Encrypting data

11. Why is data visualization important in data analytics?

1/1

ATTEMPTED

- To make the data heavier
- To create complex datasets
- To present findings in a understandable way
- To slow down the analysis process

12.

_____ is used when you want to visually examine the relationship between two quantitative variables

- Bar graph

1/1

ATTEMPTED

pie graph

line graph

Scatter plot

13.

"Continuous" VS "Discrete" can be written as?

Measured Vs Counted

1/1 ATTEMPTED

Counted Vs Measured

Measured Vs Nominal

None of these

14.

As a general rule, the _____ is the best measure of central tendency because it is more precise.

Mode

1/1 ATTEMPTED

Mean

Median

Variance

15.

_____ provides the summary statistics of data.

Descriptive Statistics

1/1 ATTEMPTED

Inferential Statistics

-

-

16.

Sample is a subset of population.

True

1/1

ATTEMPTED

False

-

-

17.

_____ contains all the elements of a dataset.

Sample

1/1

ATTEMPTED

Event

Population

None of the options

18.

_____ holds the responsibility of describing the data collected.

Probability

1/1

ATTEMPTED

- Statistics
- Both the options
- None of the options

19.

Descriptive Statistics works on _____ dataset.

- Sample 0/1 ATTEMPTED
- Population
- Both the options
-

20.

_____ is an art of learning data.

- Probability 1/1 ATTEMPTED
- Statistics
- Both the options
- None of the options

21.

Is Statistics required in the field of computer science?

- Yes, statistics plays a vital role in many areas of computer science such as machine learning, data mining, and artificial intelligence. 1/1 ATTEMPTED
-

No, statistics is not used in computer science at all.

Only basic statistical concepts are required in computer science.

Statistics is only used in certain subfields of computer science such as bioinformatics.

22.

If the assumed hypothesis is tested for rejection considering it to be true is called?

Null Hypothesis

1/1

ATTEMPTED

Statistical Hypothesis

Simple Hypothesis

Composite Hypothesis

23.

If my null hypothesis is 'Dutch people do not differ from English people in height', what is my alternative hypothesis?

English people are taller than Dutch people.

0/1

ATTEMPTED

Dutch people are taller than English people.

Dutch people differ in height from English people.

All of the statements are plausible alternative hypotheses.

24. If a distribution is skewed to the right, then it is _____

1/1

ATTEMPTED

Negatively Skewed

- Positively Skewed
- Symmetrically Skewed
- Symmetric

25. Approximately what percentage of scores fall within two standard deviation of the mean in a normal distribution?

1/1 ATTEMPTED

- 95%
- 99%
- 68%
- 35%

26. What is the purpose of descriptive statistics?

1/1 ATTEMPTED

- To predict future outcomes
- To summarize and describe the main features of a dataset
- To manipulate data for analysis
- To test hypothesis

27. Which of the following is a measure of central tendency in descriptive statistics? Answer: C) Mean

1/1 ATTEMPTED

- Range
- Variance

- Mean
- Standard Deviation

28. In descriptive statistics, what does the standard deviation measure?

1/1 ATTEMPTED

- The central tendency of the data
- The range of values in the dataset
- The spread or dispersion of values around the mean
- The frequency of each value in the dataset

29. What is the purpose of the range in descriptive statistics?

ATTEMPTED

1/1

- To measure the spread of data
- To calculate the mean of a dataset
- To identify outliers
- To determine the mode

30. What is a p-value used for in inferential statistics?

1/1 ATTEMPTED

- Describing the variability of data
- Indicating the size of a sample
- Assessing the strength of a relationship between variables
- Testing the significance of a statistical hypothesis

31. What is the purpose of hypothesis testing in inferential statistics?

1/1

ATTEMPTED

- To summarize and describe data
- To make predictions about future data
- To calculate measures of central tendency
- To draw conclusions about a population based on a sample

32. What is the primary purpose of inferential statistics?

1/1

ATTEMPTED

- To summarize data
- To make predictions about a population based on a sample
- To calculate measures of central tendency
- To visualize data trends

33. Which of the following methods is commonly used to estimate population parameters?

1/1

ATTEMPTED

- Descriptive statistics
- Confidence intervals
- Frequency distribution
- Range

34. In which situation would you use a t-test instead of a z-test?

ATTEMPTED

1/1

- When the sample size is large ($n > 30$)
- When the population standard deviation is known
- When the sample size is small ($n < 30$) and the population standard deviation is unknown
- When you are comparing proportions

35. What does the term "power of a test" refer to?

1/1

ATTEMPTED

- The likelihood of a Type I error
- The likelihood of a Type II error
- The probability of correctly rejecting a false null hypothesis
- The strength of the null hypothesis

36. If a population has a mean (μ) of 50 and a standard deviation (σ) of 10, what is the mean of the sampling distribution of the sample means ($\bar{\mu_x}$) for samples of size $n=25$?

1/1

ATTEMPTED

- 40
- 50
- 10
- 2

37. What is a Type I error?

1/1

ATTEMPTED

- Failing to reject the null hypothesis when it is false.
- Rejecting the null hypothesis when it is true.
- Making a correct decision in hypothesis testing.
- Accepting the alternative hypothesis when it is false.

38. Which of the following statements is true regarding the relationship between Type I and Type II errors?

1/1 ATTEMPTED

- Decreasing alpha increases the probability of a Type I error.
- Increasing the sample size reduces the risk of both Type I and Type II errors.
- There is no relationship between Type I and Type II errors.
- Increasing alpha decreases the probability of a Type II error but increases the probability of a Type I error

39. What is a confidence interval?

1/1 ATTEMPTED

- A single value estimate of a population parameter.
- A range of values that likely contains the population parameter, with a specified level of confidence.
- The probability that a hypothesis test is correct.
- The maximum error allowed in estimation.

40. Which of the following is a primary data collection method?

ATTEMPTED

- Surveys

1/1

- Literature reviews
- Meta-analysis
- Historical data analysis

41. Which data collection technique involves observing subjects in their natural environment without interference?

1/1 ATTEMPTED

- Controlled experiments
- Case studies
- Naturalistic observation
- Surveys

42. What is the purpose of using random sampling in data collection?

1/1 ATTEMPTED

- To ensure every participant gives a detailed response.
- To eliminate bias and ensure that the sample represents the population.
- To collect data from a predetermined group.
- To save time and resources.

43. What is a potential disadvantage of using observational methods for data collection?

1/1 ATTEMPTED

- They provide quantitative data.
- They can be time-consuming and expensive.

- They are useful for understanding cause-and-effect relationships.
- They eliminate the risk of observer bias.

44. What is the primary goal of data cleaning?

1/1

ATTEMPTED

- To analyze data more quickly.
- To ensure data quality and accuracy.
- To visualize data trends.
- To summarize data findings.

45. Which of the following is a common method for handling missing data?

1/1

ATTEMPTED

- Ignoring missing values.
- Replacing missing values with zeros.
- Imputation using mean, median, or mode.
- Deleting the entire dataset.

46. What does "data normalization" refer to?

1/1

ATTEMPTED

- The process of removing outliers from the dataset.
- The transformation of data to fit within a specific range.
- The conversion of categorical data into numerical format.

The elimination of duplicates in a dataset.

47. Which technique is commonly used to identify outliers in a dataset?

1/1 ATTEMPTED

- Mean calculation
- Standard deviation
- Data visualization (e.g., box plots)
- Data normalization

48. What is the first step in the data cleaning process?

1/1 ATTEMPTED

- Removing duplicates
- Identifying data quality issues
- Data transformation
- Data visualization

49. What is "outlier detection"?

1/1 ATTEMPTED

- A process to increase data accuracy
- A technique to find and remove records with missing values
- A method for identifying data points that differ significantly from other observations
- A way to convert categorical data into numerical data

50. What is the main purpose of deduplication in data cleaning?

ATTEMPTED

- To improve data visualization
- To increase the dataset size
- To ensure that there are no duplicate records
- To enhance the speed of data processing