STATISTICS WORKSHEET-3

1. Which of the following is the correct formula for total variation?
b) Total Variation = Residual Variation + Regression Variation

2. Collection of exchangeable binary outcomes for the same covariate data are called outcomes.
a) random

3. How many outcomes are possible with Bernoulli trial?
a) 2

4. If Ho is true and we reject it is called
b) Type-II error

5. Level of significance is also called:
c) Level of confidence

6. The chance of rejecting a true hypothesis decreases when sample size is
c) Both of them

7. Which of the following testing is concerned with making decisions using data?
b) Hypothesis

8. What is the purpose of multiple testing in statistical inference?
d) All of the mentioned

9.Normalized data are centred at and have units equal to standard deviations of the original data
a) 0

10. What Is Bayes' Theorem?
Bayes' Theorem, named after 18th-century British mathematician Thomas Bayes, is a mathematical formula for determining conditional probability. Conditional probability is the likelihood of an outcome occurring, based on a previous outcome having occurred in similar circumstances.

11. What is z-score?
Z-scores are also known as standardized scores; they are scores (or data values) that have been given a common standard. This standard is a mean of zero and a standard deviation of 1. Contrary to what many people believe, z-scores are not necessarily normally distributed .

12. What is t-test?
A T-test is the final statistical measure for determining differences between two means that may or may not be related. The testing uses randomly selected samples from the two categories or groups. It is a statistical method in which samples are chosen randomly, and there is no perfect normal distribution.

13. What is percentile?

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Percentile In statistics, a k-th percentile ( percentile score or centile) is a score
below which a given percentage k of scores in its frequency distribution falls
(exclusive definition) or a score at or below which a given percentage falls
(inclusive definition).
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14. What is ANOVA?
nalysis of variance (ANOVA) is an analysis tool used in statistics that splits an
observed aggregate variability found inside a data set into two parts: systematic
factors and random factors. The systematic factors have a statistical influence on
the given data set, while the random factors do not. Analysts use the ANOVA test to
determine the influence that independent variables have on the dependent variable in
a regression study.
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15. How can ANOVA help
ANOVA can help to identify the sources of variation in a data set. This can help to
improve the accuracy of data predictions and analyses. Additionally, ANOVA can help
to identify relationships between different variables in a data set.
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