

STATISTICS WORKSHEET-3

Q1 to Q9 have only one correct answer. Choose the correct option to answer your question.

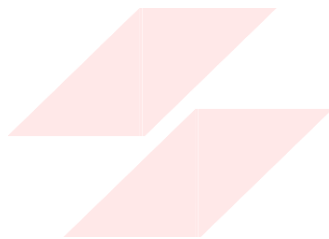
1. Which of the following is the correct formula for total variation?
 - a) Total Variation = Residual Variation – Regression Variation
 - ☒ b) Total Variation = Residual Variation + Regression Variation
 - c) Total Variation = Residual Variation * Regression Variation
 - d) All of the mentioned
2. Collection of exchangeable binary outcomes for the same covariate data are called_____outcomes.
 - a) random
 - b) direct
 - ☒ c) binomial
 - d) none of the mentioned
3. How many outcomes are possible with Bernoulli trial?
 - ☒ a) 2
 - b) 3
 - c) 4
 - d) None of the mentioned
4. If H_0 is true and we reject it is called
 - ☒ a) Type-I error
 - b) Type-II error
 - c) Standard error
 - d) Sampling error
5. Level of significance is also called:
 - a) Power of the test
 - b) Size of the test
 - ☒ c) Level of confidence
 - d) Confidence coefficient
6. The chance of rejecting a true hypothesis decreases when sample size is:
 - a) Decrease
 - ☒ b) Increase
 - c) Both of them
 - d) None
7. Which of the following testing is concerned with making decisions using data?
 - a) Probability
 - ☒ b) Hypothesis
 - c) Causal
 - d) None of the mentioned
8. What is the purpose of multiple testing in statistical inference?
 - a) Minimize errors
 - b) Minimize false positives
 - c) Minimize false negatives
 - ☒ d) All of the mentioned

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

- ☒ a) 0
- b) 5
- c) 1
- d) 10

Q10 and Q15 are subjective answer type questions, Answer them in your own words briefly.

- 10. What Is Bayes' Theorem?
- 11. What is z-score?
- 12. What is t-test?
- 13. What is percentile?
- 14. What is ANOVA?
- 15. How can ANOVA help?



FLIP ROBO