

STATISTICS WORKSHEET-1

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

1. Bernoulli random variables take (only) the values 1 and 0.

Ans. True

- Which of the following theorem states that the distribution of averages of iid variables, properly normalized, becomes that of a standard normal as the sample size increases?
- Ans. Central Limit Theorem
 - 3. Which of the following is incorrect with respect to use of Poisson distribution?
- Ans. Modeling bounded count data
 - 4. Point out the correct statement.
- Ans. All of the mentioned
 - 5. _____random variables are used to model rates.

Ans. Poisson

6. 10. Usually replacing the standard error by its estimated value does change the CLT.

Ans. False

7. 1. Which of the following testing is concerned with making decisions using data?

Ans. Hypothesis

8. 4. Normalized data are centered at _____ and have units equal to standard deviations of the original data.

Ans (

- 9. Which of the following statement is incorrect with respect to outliers?
- Ans. Outliers cannot conform to the regression relationship



Q10and Q15 are subjective answer type questions, Answer them in your own words briefly.

- 10. What do you understand by the term Normal Distribution? Ans. normal distribution, also called Gaussian distribution, the most common distribution function for independent, randomly generated variables. Its familiar bell-shaped curve is ubiquitous in statistical reports, from survey analysis and quality control to resource allocation
- 11. classification -

Normal Distribution -

- 1.) Probability Distribution Function
- 2.) Cumulative Distribution Function
- 12. How do you handle missing data? What imputation techniques do you recommend?
- 13. What is A/B testing?
- Ans. A/B testing is a way to compare two versions of a single variable, typically by testing a subject's response to variant A against variant B, and determining which of the two variants is more effective
 - 14. Is mean imputation of missing data acceptable practice?
 - 15. What is linear regression in statistics?
- Ans. Linear regression is used to study the linear relationship between a dependent variable and independent Variables.
 - 16. What are the various branches of statistics?
- Ans. There are two main branches of statistics
 - Inferential Statistic.
 - Descriptive Statistic.



