

STATISTICS WORKSHEET-1

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

a) True

2. 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?

a) Central Limit Theorem

3. Which of the following is incorrect with respect to use of Poisson distribution?

b) Modeling bounded count data

4. Point out the correct statement.

d) All of the mentioned

5. _____ random variables are used to model rates.

c) Poisson

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

b) False

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

b) Hypothesis

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

a) 0

9. Which of the following statement is incorrect with respect to outliers?

c) Outliers cannot conform to the regression relationship

10. What do you understand by the term Normal Distribution?

Normal distribution is a type of continuous distributions in which most data points cluster toward the middle of the range while the rest taper off symmetrically toward either extreme.

11. How do you handle missing data? What imputation techniques do you recommend?

For handling missing data we use mean, median and mode. Arbitrary value imputation recommended.

12. What is A/B testing?

It is the most popular experiments used to optimize web marketing strategies.

13. Is mean imputation of missing data acceptable practice?

No

14. What is linear regression in statistics?

The relationship between scalar response and one or more explanatory variables.

15. What are the various branches of statistics?

Three main branches –

Data collection

Descriptive statistics

Inferential statistics.