

## **STATISTICS WORKSHEET-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

Point out the correct statement

**Ans:** Sums of normally distributed random variables are again normally distributed even if the variables are dependent

random variables are used to model rates.

**Ans:** Poisson Modal distribution

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

**Ans:** False

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

**Ans:** Hypothesis test

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

**Ans:** 0

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

**Ans:** Outliers can have varying degrees of influence

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

**Ans:** It is also called as a Gaussian Distribution, The normal distribution used mostly is continuous data, we cannot use normal distribution to categorical data, every feature is independent variable, and mean and median mode all line up such that the Center of the distribution is the mean,

It also looks like a Bell shape Curve.

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

**Ans:** in data we can able to see whether missing values most of the data we will get unstructured data, but by using some technique's we can able to fill missing data

Mostly we will use Fillna method and imputations technique's , if features are continuous data by using mean method, if the Features are categorical data we will use mode method,

By using get dummy technique we can able to reduce the data space.

12. What is A/B testing?

**Ans:** Augmented Reality based testing. I don't know much about this.

13. Is mean imputation of missing data acceptable practice?

**Ans:** Yes, but we need to check what kind of data we Received either continuous or categorical or discrete or nominal based on the data we need to take, some times we have to take mean of the mean square papulation regarding

14. What is linear regression in statistics?

**Ans:** Regression is a Statistical technique that Relates a dependent variable to one or more independent variables ,it is used to predict the value od variable based on the value of another variable.

15. What are the various branches of statistics?

**Ans:** there are 3 real branches of statics data collection, descriptive statistics and inferential statistics.

