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

Ans- 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?

Ans- a) Central Limit Theorem

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

Ans- b) Modeling bounded count data

4. 4. Point out the correct statement.

a) The exponent of a normally distributed random variables follows what is called the log-normal distribution

b) Sums of normally distributed random variables are again normally distributed even if the variables are dependent

c) The square of a standard normal random variable follows what is called chi-squared distribution

d) All of the mentioned

Ans- c) The square of a standard normal random variable follows what is called chi-squared distribution

5. _____ random variables are used to model rates.

Ans- c) Poisson

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

Ans- b) False

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

Ans- b) Hypothesis

8. Normalized data are centered at_____and have units equal to standard deviations of the original data.

Ans- a) 0

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

Ans- c) Outliers cannot conform to the regression relationship

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

Ans-The normal distribution , also known as the gaussian distribution, is a statical pattern commonly seen in various natural and social phenomena.

11. 12. What is A/B testing?

Ans-A/B Testing is also known as split testing, is a method used in statistics and marketing to Compare two version of webpage,application, or other content to determine which one performs Better.

13. Is mean imputation of missing data acceptable practice?

Ans-mean imputation , where missing values are replaced with the mean of the non-missing Values in the same variable, is a simple and commonly used method for handling missing data. However , whether it's an acceptable practise depends on the context and the nature of the data.

14 What are the various branches of statistics?

Ans-

1.Descriptive statistics: involves methods to summarize and describe data, including measure of Central tendency (mean,median ,mode), measure of dispersion(range, variance, standard deviation) and graphical representation

2.Inferential Statistics

3.Probility theory

4.stastistical inference

5.biostastics

6.econometrix

7.social statistics

8.business statistics

9.psylogical statistics

10.environmental statistics

11.acturial science

12.data science

13. machine learning

14.quality control

15.nonparametric statistics