Statistics :-

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?

Answer:- (a) Central Limit Theorem

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

Answer:-b) Modeling bounded count data

4.Point out the correct statement.

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

5. _____ random variables are used to model rates.

Answer: c) Poisson

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

Answer:- False

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

Answer:- b) Hypothesis

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

Answer:-a) 0

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

Answer:- c) Outliers cannot conform to the regression relationship.

10.What do you understand by the term Normal Distribution

Answer:- A normal distribution is an arrangement of a data set in which most values cluster in the middle of the rang e and the rest taper off symmetrically toward either extreme.

Height is one simple example of something that follows a normal distribution pattern: Most people are of average he ight, the numbers of people that are taller and shorter than average are fairly equal and a very small (and still roughl y equivalent) number of people are either extremely tall or extremely short.

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

Answer:- Use deletion methods to eliminate missing data and can use data imputation techniques.Data scientists use

two data imputation techniques to handle missing data: Average imputation and common-point imputation.The best way to handle such situations is to develop contingency plans to minimise the damage.

12. What is A/B testing?

Answer:-A/B testing, also known as "split testing," is one of the most effective ways to make measurable (and scient ific) improvements to your online presence. The practice takes two versions of a piece of content, like a landing pag e, and runs them simultaneously to equally sized audiences to see which page performs better. A/B tests are so relied upon in marketing because when performed properly, they give you concrete evidence on which changes can drive more conversions for your company

13.Is mean imputation of missing data acceptable practice?
Answer:- True, imputing the mean preserves the mean of the observed data. So if the data are missing completely at random, the estimate of the mean remains unbiased. That's a good thing. ... Since most research studies are intereste d in the relationship among variables, mean imputation is not a good solution.

14. What is linear regression in statistics?
Answer:- linear regression uses one independent variable to explain or predict the outcome of the dependent variable Y, while multiple linear regression uses two or more independent variables to predict the outcome. Regression can help finance and investment professionals as well as professionals in other businesses.

15. What are the various branches of statistics?

Answer:- The two major areas of statistics are known as descriptive statistics, which describes the properties of sam ple and population data, and inferential statistics, which uses those properties to test hypotheses and draw conclusion s