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

   Answer: - The Answer for the above question is True Because the Bernoulli distribution arises as the result of a binary Outcome.

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: - The Central Limit theorem is one of the most important theorems in statistics.

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

   Answer: - Poisson distribution is used for modelling unbounded count data.

4. Point out the correct statement.

   Answer: - answer is (D): - All of the mentioned

5. _____ random variables are used to model rates

   Answer: - Poisson Option (c)

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 cantered at _____ and have units equal to standard deviations of the original data.

   Answer: - Option A

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

   Answer: - Option C

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 range and the rest taper off symmetrically toward extreme.

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

    Answer: - According to data Analysis there are three type of Missing Data:
    1. Missing completely at random (MCAR)-
    2. Missing At Random (MAR)-
    3. Not Missing AT Random (NMAR)-

    There are Specific Techniques to Deal with Missing Data: -
    1. Mean or Median imputation
    2. Multivariate imputation by chained equations.

12. What is A/B testing?

    Answer- A/B testing, also known as split testing, refers to **a randomized experimentation process wherein two or more versions of a variable** (web page, page element, etc.) are shown to different segments of website visitors at the same time to determine which version leaves the maximum impact and drive business metrics.

13. Is mean imputation of missing data acceptable practice?

    Answer- 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 interested in the relationship among variables, mean imputation is not a good solution.

14. What is linear regression in statistics?

    Answer: - Linear regression attempts to model the relationship between two variables by fitting a linear equation to observed data. One variable is an explanatory variable, and the other is a dependent variable.

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 sample and population data, and **inferential statistics**, which uses those properties to test hypotheses and draw conclusions