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

Ans :- B
    Modeling bounded count data

4. Point out the correct statement.

Ans :- D
    All of the mentioned

5. _____ random variables are used to model rates.

Ans : C
     Poisson

6. 10. 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. 4. 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 is most widely known and use in all distribution.
Because the normal distrinution approximate many natural phynomena so well, It has developed into a
standard of reference for many probabilty problem.

11. How do you handle missing data? What imputation techniques do you recommend?
Ans :- The best possible method of handling the missing data is to prevent the problem by
well-planning the study and collecting the data carefully.
The following are suggested to minimize the amount of missing data in the clinical research.

12. What is A/B testing?

also known as split testing, refers to a randomized experimentation process wherein two or more
versions of a variable are shown to different segments of website visitors at
the same time to determine which version leaves the maximum impact and drives business metrics.

13. Is mean imputation of missing data acceptable practice?

The process of replacing null values in a data collection with the data’s mean is known as mean imputation.

Mean imputation is typically considered terrible practice since it ignores feature correlation.
Consider the following scenario: we have a table with age and fitness scores,
and an eight-year-old has a missing fitness score. If we average the fitness scores of people between the ages of 15 and 80, the eighty-year-old will appear to have a significantly greater fitness level than he actually does.

Second, mean imputation decreases the variance of our data while increasing bias.
As a result of the reduced variance, the model is less accurate and the confidence interval is narrower.

14. What is linearregression in statistics?

Ans :- In statistics, linear regression is a linear approach for

modelling the relationship
between a scalar response and one or more explanatory variables
(also known as dependent and independent variables).
The case of one explanatory variable is called simple linear
regression;
for more than one, the process is called multiple linear regression.

15. What are the various branches of statistics?

Ans :- Two branches, descriptive statistics and inferential
statistics,

1) Descriptive Statistics:- The branch of statistics that focuses on
collecting, summarizing,
    and presenting a set of data.
2) Inferential Statistics:- The branch of statistics that analyzes
sample data to draw
    conclusions about a population.