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

Ans: 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: Central Limit Theorem

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

Ans: Modeling bounded count data.

4. Point out the correct statement.

Ans: All of the mentioned

5. _____ random variables are used to model rates.

Ans: Poisson

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

Ans: False

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

Ans: Hypothesis

8. . 4. 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 cannot conform to the regression relationship

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

Ans: In probability theory and statistics, the Normal Distribution, also called the Gaussian Distribution, is the most significant continuous probability distribution. Sometimes it is also called a bell curve. A large number of random variables are either nearly or exactly represented by the normal distribution, in every physical science and economics. Furthermore, it can be used to approximate other probability distributions, therefore supporting the usage of the word 'normal 'as in about the one, mostly used.

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

Ans: When dealing with missing data, data scientists can use two primary methods to solve the error: imputation or the removal of data. The imputation method develops reasonable guesses for missing data.

Mean, Median, Mode Techniques

12. What is A/B testing?

Ans: A/B testing is a way to compare two versions of a single variable, typically by testing a subject's response to variant A against variant B, and determining which of the two variants is more effective.

13. Is mean imputation of missing data acceptable practice?

Ans: 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. Plus, by imputing the mean, you are able to keep your sample size up to the full sample size.

14. What is linear regression 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. This term is distinct from multivariate linear regression, where multiple correlated dependent variables are predicted, rather than a single scalar variable.

15. What are the various branches of statistics?

Ans: The two main branches of statistics are descriptive statistics and inferential statistics. Both of these are employed in scientific analysis of data and both are equally important for the student of statistics.