## **STATISTICS WORKSHEET-1**

- 1. A
- 2. A
- 3. B
- 4. D
- 5. **C**
- 6. B
- 7. B
- 8. A
- 9. C
- 10. What do you understand by the term Normal Distribution?

  Ans.It is a probability distribution that is symmetric about the mean, showing that data near the mean are more frequent in occurrence than data far from the mean
- 11. How do you handle missing data? What imputation techniques do you recommend? Ans.
  - 1.Use deletion methods to eliminate missing data. The deletion methods only work for certain datasets where participants have missing fields. ...
  - 2.Use regression analysis to systematically eliminate data. ...
  - 3.Data scientists can use data imputation techniques.
- 12. What is A/B testing?

Ans.

A/B testing (also known as bucket testing or split-run testing) is a user experience research methodology A/B tests consist of a randomized experiment with two variants, A and B. It includes application of statistical hypothesis testing or "two-sample hypothesis testing" as used in the field of statistics. 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.

## 14. What is linear regression in statistics?

Ans. Linear regression analysis is used to predict the value of a variable based on the value of another variable. The variable you want to predict is called the dependent variable. The variable you are using to predict the other variable's value is called the independent variable.

## 15. What are the various branches of statistics?

There are three real branches of statistics: data collection, descriptive statistics and inferential statistics.