Python Tasks Solutions:

Ques.1: Option: C)

Ques.2: Option: B)

Ques.3: Option: C)

Ques.4: Option: A)

Ques.5: Option: D)

Ques.6: Option: B)

Ques.7: Option: A)

Ques.8: Option: C)

Ques.9: Option: A) and C)

Ques.10: Option: A) and B)

Statistics Tasks Solutions:

Ques.1: Option: A)

Ques.2: Option: A)

Ques.3: Option: B)

Ques.4: Option: D)

Ques.5: Option: C)

Ques.6: Option: B)

Ques.7: Option: B)

Ques.8: Option: A)

Ques.9: Option: C)

Ques.10: Normal Distribution: Basically, the normal distribution is the difference between the mean of the data and the standard deviation, or we call it distance between the from above and below of the mean to standard distribution. Which also help to find out the presence of variance between the data.

Normal distribution is also known as bell curve. Mean is calculated to get an average of data, after which we get the difference between the mean up to the actual value of data the actual and squared it to find out the variance. After that square root of the variance to get the standard deviation here we squared the variance only to get actual value or nearby of it.

Ques.11: a) We delete the complete row in which data is missing either from any of column.

b) Replace the value with mean, median, SD, etc. to get the accuracy.

c) Regression value is help to replace with NAN value or the missing value.

d) If all the missing value lie in a column, then the best option is to delete the entire column or fill the missing data with Statistics value.

Ques.12: A/B testing: A/b testing is done to find out the difference between the two variables. In a/b testing is like how a hypothesis testing is done by applying algorithm over the data.

Ques.14: Linear Regression: Linear regression is used for finding the linear line between the two variable or the two axes. The variable which we have to predict is called as the dependent variable, another variable accepting predict is called as independent variable. Linear regression is the straight line between the predicted value and actual value.

Ques.15: Various branches of Statistics: In statistical basically they have two major branches one is 1) Inferential statistic which is used to make inference and describe about the population.
2) Second is Descriptive Statistic which is used to get brief summary of the data in the form of graphical.

Machine Learning Tasks Solutions:

Ques.1: Option: A)

Ques.2: Option: A)

Ques.3: Option: B)

Ques.4: Option: A)

Ques.5: Option: B)

Ques.6: Option: B)

Ques.7: Option: B)

Ques.8: Option: A)

Ques.9: Option: A)

Ques.10: Option: A)

Ques.11: Option: A)

Ques.12: Option: A) and B)

Ques.13: Regularization: Regularization is a type procedure which help to reduce the error by fitting a function over the given training set to avoid the overfitting.

Ques.14: Basically, there are three algorithms used for regularization:

1). LASSO

2). Ridge Regression

3).Net Regression

Ques.15: Error term present in the linear regression is to represent the margin of the error within the statistical calculation, which help to find out the explanation between the predicted value and the actual values. An error terms also called as the disturbance value. Basically equation is used to calculate the error value “y = a + bx + cx2 + d”; here in this equation ‘d’ is the error value.