

Question 1 A  
Question 2 A  
Question 3 B  
Question 4 D  
Question 5 C  
Question 6 B  
Question 7 B  
Question 8 A  
Question 9 C

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

In statistics some curve starts earlier. This curve known as normal curve or normal distribution of data. Especially When we have a large data if data has mean value = 0 and Standard deviation =  $\pm 1$  this is ideal normal curve or ideal normal distribution.

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

```
df.isnull().sum() and we can visualize like this sns.heatmap(df.isnull())
import numpy as np
df["Variable name"].replace(np.NaN,df["Variable name"].mean,inplace=True)
```

Question 12 What is A/B testing?

It is a way to compare the two versions of a variable to find out which performs better in a controlled environment.

We may divide the data into two parts – A and B. Here A will remain unchanged while you make significant changes in B

On the basis of the data used A and B respectively, you try to decide which is performing better.

Question 13 Is mean imputation of missing data acceptable practice?

Yes its acceptable. Because, if the missing data amount is more we can not drop it because we will losing information

Question 14 What is linear regression in statistics?

Linear regression is a basic and commonly used type of predictive analysis. The overall idea of regression is to examine two things:

1 does a set of predictor variables do a good job in predicting an outcome (dependent) variable? 2 Which variables in particular are

significant predictors of the outcome variable These regression estimates are used to explain the relationship between one dependent variable

and one or more independent variables.

Question 15 What are the various branches of statistics?

Descriptive statistics: Are procedures used to summarize, organize, and make sense of a set of scores or observations

Descriptive statistics also divided 2 categories: Central Tendency ---- We are talking about Mean, Median and Mode

and Dispersion of data ----- There are certain functionality Range, Variance, Std Deviation, Skew and Percentile

Inferential statistics: procedures used to allow researchers to infer or generalize, observations made with samples to the

larger population from which they were selected. Inside the Inferential statistics we use Z-score and Hypothesis test

Inside Hypothesis testing we use T-test, Correlation test, Chi-square test, ANOVA(F-test)