Q1. What is central limit theorem and why is it important?
Ans: Central Limit theorem say that if take sample (N) from population and measure its mean then its mean roughly equal to population mean, if sample is greater than 30 and get sample data as a normal sample distribution.

Q2. What is sampling? How many sampling methods do you know?
Ans: Sampling is a technique which is studies of population. Type of sampling technique.

1. Stratify sampling
2. Random sampling
3. Systematic sampling
4. Convenience sampling

Q3. What is the difference between type1 and type II error?
Ans: Type 1 error (false-positive) , if my ML predict false and reject null hypothesis, but actual is True, And type 11 error(false-negative), if my ML predict True and accept null hypothesis but actual is False.

Q4. What do you understand by the term Normal distribution?
Ans: A normal distribution is a type of continuous probability distribution, which form of the graph is symmetric, if graph divide in centre.

Q5. What is correlation and covariance in statistics?
Ans: Correlation is measuring that how strong relation with two random variables with each other's.
Covariance is a indicator of the two dependent variable with each other. Covariance nothing but a measure of correlation.

Q6. Differentiate between univariate, Bivariate, and multivariate analysis.
Ans: Univariate is summarized only one variable at a time, Bivariate is compare two variables at a time. Multivariate is compare more than two variables at a time.

Q7. What do you understand by sensitivity and how would you calculate it?
Ans: Sensitivity is affected to change in target variable with depend upon its input variable.
Sensitivity = Percentage change in output / Percentage change in input

Q8. What is hypothesis testing? What is H0 and H1? What is H0 and H1 for two-tail test?
Ans: Hypothesis testing is used in statistics whereby analyst test an assumption regarding population parameters. H0 is represent as accept null hypothesis and H1 is represent is alternative hypothesis.

Q9. What is quantitative data and qualitative data?
Ans: Quantitative is a continuous data. And qualitative is categorical data.

Q10. How to calculate range and interquartile range?
Ans: Range is a difference between maximum and minimum. But interquartile range (IQR) is difference between third quartile (Q3) and first quartile(Q1).

Q11. What do you understand by bell curve distribution?
Ans: Bell curve distribution is also called Normal distribution. If take normal distributed data and plot a graph then its shape is like a bell.

Q12. Mention one method to find outliers.
Ans: Z-score

Q13. What is p-value in hypothesis testing?
Ans: p value is the statical value which is calculate for accept or reject null hypothesis. If $p>0.05$ then probability that null hypothesis is True.

Q14. What is the Binomial Probability Formula?

Ans: Binomial Probability = $P(x:n,p) = nCx\ px\ (1-p)n-x$ Or $P(x:n,p) = nCx\ px\ (q)n-x$

Q15. Explain ANOVA and its applications.

Ans: ANOVA (Analysis of Variance) is an analysis tool, that used for found aggregation velocity inside data set into two part.