Q 01.	Which of the following is the correct formula for total variation?
A 01.	b) Total Variation = Residual Variation + Regression Variation
Q 02.	Collection of exchangeable binary outcomes for the same covariate data are called _____ outcomes.
A 02.	c) binomial
Q 03.	How many outcomes are possible with Bernoulli trial?
A 03.	a) 2
Q 04.	If Ho is true and we reject it is called
A 04.	a) Type-I error
Q 05.	Level of significance is also called:
A 05.	b) Size of the test
Q 06.	The chance of rejecting a true hypothesis decreases when sample size is:
A 06.	b) Increase
Q 07.	Which of the following testing is concerned with making decisions using data?
A 07.	b) Hypothesis
Q 08.	What is the purpose of multiple testing in statistical inference?
A 08.	d) All of the mentioned outcomes.
Q 09.	Normalized data are centred at _____ and have units equal to standard deviations of the original data
A 09.	a) 0
Q 10.	What Is Bayes' Theorem?
A 10.	Bayes' Theorem is a mathematical formula for determining conditional probability. It is the likelihood of an outcome occurring, based on a previous outcome having occurred in similar circumstances. It provides a way to revise existing predictions or theories and update probabilities given new or additional evidence.
Q 11.	What is z-score?
A 11.	Z-score (also called a standard score) gives us an idea of how far from the mean a data point is. It’s a measure of how many standard deviations below or above the population mean a raw score is.
Q 12.	What is t-test?
A 12.	A t-test is a statistical test that is used to compare the means of two groups. It is often used in hypothesis testing to determine whether a process or treatment actually has an effect on the population of interest, or whether two groups are different from one another.
Q 13.	What is percentile?

A 13.	A percentile describes how a score compares to other scores from the same set. It is commonly expressed as the percentage of values in a set of data scores that fall below a given value.
Q 14.	What is ANOVA?
A 14.	Analysis of variance (ANOVA) is an analysis tool used in statistics that splits an observed aggregate variability found inside a data set into two parts: systematic factors and random factors. The systematic factors have a statistical influence on the given data set, while the random factors do not. ANOVA test is used to determine the influence that independent variables have on the dependent variable in a regression study.
Q 15.	How can ANOVA help?
A 15.	ANOVA is helpful for testing three or more variables. It is similar to multiple two-sample t-tests. However, it results in fewer type I errors and is appropriate for a range of issues. ANOVA groups differences by comparing the means of each group and includes spreading out the variance into diverse sources.