

FBQ1: The t test was Mean and ____ of two samples to make comparison

Answer: Standard deviations

FBQ2: Given the following simple regression model $Y = a_0 + a_1X_1 + a_2X_2$, the dependent variable in the model is ____

Answer: Y

FBQ3: Given the following simple regression model $Y = a_0 + a_1X_1$, the independent variable in the model is ____

Answer: X_1

FBQ4: Application of Simple Linear regression analysis is the way by which we subject different data to statistical analysis by using computer software such as strata, e-view to analyse and predict the relationship between the dependent variable and ____

Answer: independent variable

FBQ5: In the case of more than one explanatory variable is called ____ regression.

Answer: multiple

FBQ6: In the case of one explanatory variable is called ____ linear regression.

Answer: simple

FBQ7: In statistics, ____ is an approach for modelling the relationship between a scalar dependent variable y and one or more explanatory variables denoted x

Answer: linear regression

FBQ8: Regression analysis is also used in casual relationship between a linear model that is between the dependent variable to an ____

Answer: independent variables

FBQ9: Regression analysis is widely used for ____ and forecasting

Answer: prediction

FBQ10: Regression analysis is a statistical process for estimating the relationship among ____

Answer: variables

FBQ11: The term regression was introduced by ____

Answer: Francis Galton

FBQ12: ____ is a test that allows us to compare a collection of categorical data with the theoretical distribution

Answer: Chi Square Goodness of Fit

FBQ13: It is ____ when the descendants were able to locate their origin which is the primitive function.

Answer: integration

FBQ14: ____ is an approach used in ANOVA (that is a regression analysis involving two qualitative factors) to detect whether the factor variables are additively related to the expected value of the response variables.

Answer: Turkey's Test of Additivity

FBQ15: ____ is a statistical test that is used on paired nominal data

Answer: McNemar's Test

FBQ16: ____ are collections of test statistics that is used for the analysis of stratified categorical data

Answer: Cochran-Mantel Statistics

FBQ17: ____ is used when testing for independence in a contingency table.

Answer: Yate's correction for continuity

FBQ18: _____ is a statistical test that is applied to categorical data to investigate how likely it is that any observed difference between the sets arose by chance and it is good for unpaired data that can be seen from large samples.
Answer: Pearson's Chi-square Test

FBQ19: A _____ can said to be a measurement of how expectations are compared to results.

Answer: Chi-square

FBQ20: An _____ can be defined as any statistical test in which the test statistics has an F distribution under a null hypothesis situation and it is usually used when comparing statistical models in a data set so that we can identify the mode that best fits the population where the date were sampled
Answer: F test

FBQ21: The T statistic was introduced in _____ by William Sealy Gosset, a chemist working for the Guinness Brewery in Dublin, Ireland
Answer: 1908

FBQ22: A t-test is any statistical test in which the test statistic follows a student's t _____ if the null hypothesis is supported.
Answer: distribution

FBQ23: A _____ is the set of all possible values of a particular statistic
Answer: sampling distribution

FBQ24: If the parameters are over estimated, the sampling errors are _____
Answer: positive errors

FBQ25: If the parameters are under estimated, the sampling errors are _____
Answer: negative errors

FBQ26: Sampling error (E) is defined as the difference between the sample statistic (s) and the _____ being estimated
Answer: Population parameter

FBQ27: The first important attribute of a sample is that every individual in the population from which it is drawn must have a known _____ chance of being included in it
Answer: non zero

FBQ28: _____ is a population commonly contains too many individuals to study conveniently
Answer: samples

FBQ29: Sampling where each member cannot be chosen more than once is called sampling _____
Answer: without replacement

FBQ30: Sampling where each member of the population may be chosen more than once is called sampling _____
Answer: with replacement

FBQ31: _____ theory deals with the study of the relationships that exist between a given population and the samples drawn from the population.
Answer: Sampling

FBQ32: Confidence interval is used to determine all reasonably likely values of the difference between two _____
Answer: population means

FBQ33: Matching is carried out by identifying pairs of values consisting of one

observation from each of the two _____

Answer: samples

FBQ34: In an experimental research, the scientist may have two groups, an experimental group and a _____

Answer: control group

FBQ35: _____ enables us to have an estimate of how sample mean deviates from the population mean

Answer: interval estimation

FBQ36: Interval estimation involves estimating an interval which is known as _____

Answer: confidence interval

FBQ37: Another technique that can be employed with respect to the issue of rejecting or accepting H_0 is _____

Answer: interval estimation

FBQ38: The standard deviation of the sampling distribution is known as the _____

Answer: standard error

FBQ39: In this situation, the population for which inferences is to be made is assumed to be normally distributed with _____

Answer: mean and variance

FBQ40: If the 0.05 level of significance is to be used in a two tailed test, the 0.05 level is shared between the two ends of the tails giving 0.025 or _____

Answer: 2½%

FBQ41: The _____ curve is one of the most popular models used in statistical tests of hypothesis

Answer: normal

FBQ42: The two tailed test gets its name from testing the area under both of the tails (sides) of a _____

Answer: normal distribution

FBQ43: The one tailed test gets its name from testing the area under one of the tails (sides) of a _____

Answer: normal distribution

FBQ44: _____ is a statistical test in which the critical area of a distribution is two sided and tests whether a sample is either greater than or less than a certain range of values.

Answer: two tailed tests

FBQ45: _____ is a statistical test in which the critical area of a distribution is one-sided so that it is either greater than or less than a certain value, but not both.

Answer: one tailed tests

FBQ46: In test of hypothesis, the maximum probability of risking a type 1 error is known as the _____

Answer: level of significance

FBQ47: The probability (or risk) of committing _____ error is denoted by the Greek letter β

Answer: type 2

FBQ48: The probability (or risk) of committing error _____ on a true null hypothesis is denoted by the Greek letter α

Answer: type 1

FBQ49: Type 2 error is a situation when one accepts the hypothesis when it should be _____

Answer: Rejected

FBQ50: _____ occurs when/if an hypothesis (Null hypothesis) is rejected when it should be accepted and this occurs when the hypothesis value falls within acceptance region.

Answer: type 1 error

MCQ1: The standard deviation is to the mean as the _____ is to the regression line.

Answer: SSR

MCQ2: The regression equation for predicting number of speeding tickets (Y) from information about driver age (X) is $Y = -.065(X) + 5.57$. How many tickets would you predict for a twenty-year-old?

Answer: 4.27

MCQ3: A regression analysis is inappropriate when _____

Answer: There is heteroscedasticity in the scatter plot.

MCQ4: The _____ distribution has been applied to model the behaviour of random variables limited to intervals of finite length in a wide variety of disciplines

Answer: None of the options

MCQ5: When a die is thrown once, the probability of getting one is _____

Answer: None of the options

MCQ6: _____ measure is the standard way of assigning a measure to a subsets of an n-dimensional volume

Answer: Lebesgue

MCQ7: One explanatory variable is called a _____

Answer: Simple Regression

MCQ8: Abdalla company prints baseball cards. The company claims that 40% of the cards are rookies, 70% veterans and 10% are all stars. Suppose a random sample of 100 cards has 50 rookies, 48 veterans and 8 all-stars. Using 95% level of significance, Calculate the claim of the company

Answer: 22.34

MCQ9: An F test is a statistical test in which the test statistics has _____ distribution under a null hypothesis situation

Answer: None of the options

MCQ10: In Probability and Statistics, a probability distribution assigns a probability to each measurable subset of the possible outcomes of a _____

Answer: Random experiment

MCQ11: When an equation is in a general term in a multinomial expansion it is called _____

Answer: Multinomial distribution

MCQ12: A Company short lists 12 applicant for an interview out of which 4 are men. If there are only five vacant posts to be filled, find the probability that the list of successful applicant contains at least 2 men.

Answer: None of the options

MCQ13: If an individual were selected at random from a large group of adult females, the probability that it has height M is precisely 68 inches (that is 68.00 inches) would be zero. What is the probability that M is between 67.00 inches and 68.00 inches.

Answer: None of the options

MCQ14: _____ is a random variables that we assigns a probability to each possible value

Answer: Discrete random variables

MCQ15: A deck of cards has a uniform distribution because the likelihood of drawing a heart, a club, a diamond or spade is equally _____

Answer: Likely

MCQ16: The Cauchy distribution is named after _____

Answer: None of the options

MCQ17: Null hypothesis is denoted as _____

Answer: H_0

MCQ18: _____ error occurs when/if an hypothesis is rejected when it should be accepted

Answer: Type 1

MCQ19: The numerical value of the decision rule is called _____

Answer: All of the options

MCQ20: A coin also has a uniform distribution because the _____ in a coin toss is the same

Answer: Probability of getting either heads or tails

MCQ21: Calculate the variance of uniform distribution given that $(a + b) = 6/200$ and $b = 2.20$ while $a = 1.10$

Answer: None of the options

MCQ22: The two types of hypothesis are _____ and _____ hypothesis

Answer: Null and Alternative

MCQ23: In statistical analysis the 99% confident level is also known as _____

Answer: 0.01

MCQ24: A _____ is any statistical test in which the test statistic follows a student's t distribution if the null hypothesis is supported.

Answer: T test

MCQ25: In a statistics examination for secondary students, the 23 females used in the study has a mean score of 81 and a variance of 12 while the 20 males used has a mean score of 78 and a variance of 10. Do you think gender have an effect on the score of the secondary student at 99% level significance?

Answer: None of the options

MCQ26: _____ is used to determine all reasonably likely values of the difference between two population means

Answer: None of the options

MCQ27: A graph for frequency distribution can be supplied by a _____

Answer: All of the options

MCQ28: H_0 in hypothesis testing is ____

Answer: Null of the options

MCQ29: When a random variable takes values from a continuous probabilities that are non zero, this can only refer to _____

Answer: Infinite intervals

MCQ30: H_1 in hypothesis testing is _____

Answer: None of the options

MCQ31: Given a constant b such that the function $f(n) = bn^2$ is 0,1,2.

Find the probability of x is greater than 1 and less than 2

Answer: 0.26

MCQ32: _____ is a type of probability distribution in which all outcomes are equally alike

Answer: Distribution

MCQ33: The t statistics was introduced in _____ year

Answer: 1908

MCQ34: _____ test is used when testing for independence in a contingency table

Answer: None of the options

MCQ35: The t statistic was introduced by Willian Sealey Gosset a _____ working for Guinness Brewery in Dublin Finland

Answer: None of the options

MCQ36: _____ test is a statistical test that is used on paired nominal data

Answer: Mc Nemar's

MCQ37: _____ is a statistics process for estimating the relationship among variables.

Answer: Regression analysis

MCQ38: Given $Z = B_0 + B_1X_1 + B_2X_2$. From the equation above, the explanatory variables are _____

Answer: All of the options

MCQ39: Regression analysis is widely used for _____ and _____

Answer: Prediction and Forecasting

MCQ40: In a statistics examination for secondary students, the 12 females used in the study has a mean score of 71 and a variance of 22 while the 10 males used has a mean score of 77 and a variance of 8. Calculate the confidence intervals at 99% level of significance.

Answer: None of the options

MCQ41: The calculation of sampling distribution is a step forward to look at different ways of obtaining distribution of proportion process of _____ data

Answer: Pooled

MCQ42: The values of a parameter and that of the corresponding statistics are not always the same _____

Answer: Population

MCQ43: _____ statistical test in which the critical area of a distribution is one-sided

Answer: One-tailed test

MCQ44: If 150 tosses are made of a fair coin, find the probability that between 38% and 78% will be heads

Answer: None of the options

MCQ45: Calculate the mean of a uniform distribution given that $(a+b) = 7/128$ and $b = 6.40$ while $a = 2.10$

Answer: None of the options

MCQ46: The Cauchy distribution is often used in statistics as the canonical example of pathological distribution since both its mean and its variance are _____

Answer: Undefined

MCQ47: Alternative hypothesis is denoted as _____

Answer: H_1

MCQ48: _____ is a tentative statement in a statistical analysis

Answer: None of the options

MCQ49: One of the uses of statistics is to make a _____

Answer: Decisive decision

MCQ50: Three out of the 9 finalists in an African American beauty competition are Nigerians. If two winners are to be selected, find the probability that; at least one of them would be a Nigerian.

Answer: 0.58