

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: Mc Nemar's Test
FBQ16: are collections of test statistics that is used for the analysis of stratified categorical data Answer: Cochram–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 areAnswer: positive errors
FBQ25: If the parameters are under estimated, the sampling errors areAnswer: 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 samplingAnswer: 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 Ho 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: $2\hat{A}\frac{1}{2}\%$
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) or committing error is denoted by the Greek letter β Answer: type 2
FBQ48: The probability (or risk) or committing erroron 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

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 whenAnswer: 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 disciples 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
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 sunset of the possible outcomes of a Answer: Random experiment
MCQ11: Â 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 Answer: Discrete random variables MCQ15: A deck of cards has a uniform distribution because the likelihood of drawing a eks.com 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: Ho 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: Â A coin also has a uniform distribution because the in a coin toss is 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 = 1.10Answer: 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: À 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: Â Ho in hypothesis testing is Answer: Null of the options
MCQ29: Â When a random variable takes values from a continuous probabilities that are non zero, this can only refer to Answer: Infinite intervals
MCQ30: H1 in hypothesis testing is Answer: None of the options
MCQ31: $\hat{A}$ Given a constant b such that the function $f(n) = bn$ square is 0,1,2. Find the probability of x is greater than 1 and less than 2 Answer: 0.26
MCQ32: Â is a type of probability distribution in which all outcomes are equally alike Answer: Distribution
MCQ33: The t statistics was introduced in 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 = Bo + B1X1 + B2X2. 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: A 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 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: H1 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