

Question MCQ1 : The two possible values of each in a Bernoulli process X_i are often called?

Answer: "success" and "failure"

Question MCQ2 : The negative Binomial variables may be interpreted as what?

Answer: Random waiting times

Question MCQ3 : The probability of tossing a coin once and getting a head is?

Answer: 0.5

Question MCQ4 : The total probability for any event is?

Answer: 1

Question MCQ5 : If a random variable X takes only integral values it can be called?

Answer: Discrete probability distribution.

Question MCQ6 : The normal distribution was first discovered by English Mathematician _____?

Answer: De-Moivre

Question MCQ7 : The following are properties of the normal distribution curve except

Answer: The curve is not symmetric about a vertical axis

Question MCQ8 : A random variable X has a normal distribution, and it is referred to as _____

Answer: a normal random variable

Question MCQ9 : Using normal tables, find the values of the following probabilities:

$P(-1.50 < z < 2.50)$

Answer: 0.9270

Question MCQ10 : Given a normal distribution with mean of 230 and standard deviation of 20, what is the probability that an observation from this population is: Greater than 280

Answer: 2.50

Question MCQ11 : We know that for a binomial variate X with parameter n and p is _____

Answer: $E(X) = np$ and $Var(X) = npq$

Question MCQ12 : Poisson distribution was derived in what year?

Answer: 1837

Question MCQ13 : Poisson distribution may be obtained as a limiting case of which distribution?

Answer: Binomial probability distribution

Question MCQ14 : The mean number of misprints per page in a book is 1.2. What is the probability of finding on a particular page no misprints?
Answer: 0.301

Question MCQ15 : A statistical hypothesis test is a method of making decisions using ____?
Answer: Data from a scientific study.

Question MCQ16 : The following are statistical test tools except
Answer: E -t test

Question MCQ17 : One out of the following is assumption for F-test for equality of variances.
Answer: The samples are simple random samples

Question MCQ18 : Chi-square distribution test one among the following:
Answer: Goodness of fit

Question MCQ19 : ANOVA can be how many ways?
Answer: One-way or two-way

Question MCQ20 : Statistics that do not assume the data or population have any characteristic structure or parameters is called?
Answer: Non-parametric statistics

Question MCQ21 : In statistics, the term non-parametric statistics has at least how many different meanings?
Answer: Two

Question MCQ22 : Price and supply of a commodity is example what correlation?
Answer: Positive correlation

Question MCQ23 : Rainfall and Farm yield is example what correlation?
Answer: Positive correlation

Question MCQ24 : Tax rate and consumption demand is example what correlation?
Answer: Negative correlation

Question MCQ25 : Karl Pearson's coefficient of correlation is
Answer: Non-Parametric statistic

Question MCQ26 : Spearman's Rank Correlation Coefficient, usually denoted by?
Answer: ρ (Rho)

Question MCQ27 : A more accurate way of finding the line of best fit is through the use of
Answer: Least square method

Question MCQ28 : A simple regression model comprise of how may variables?

Answer: 2

Question MCQ29 : In simple regression model how many independent variable do we have?

Answer: 1

Question MCQ30 : $Y = a + bX + e$.

Answer: Simple regression model

Question MCQ31 : In probability theory central limit theorem states that given a certain conditions the mean of a sufficiently _____ of iterates.

Answer: large number

Question MCQ32 : By the law of large numbers, the sample averages converge in probability and almost surely to the expected value

Answer: $\hat{\mu}$ as $n \rightarrow \infty$.

Question MCQ33 : Ten unbiased coins are tossed simultaneously. Find the probability of obtaining: Exactly six heads

Answer: 0.2051

Question MCQ34 : All these are types of Index Numbers except

Answer: Value added tax index number

Question MCQ35 : Below are not problems in the construction of Index Numbers except

Answer: Choice of formula

Question MCQ36 : Below ate methods of constructing index numbers except

Answer: Simple aggregate

Question MCQ37 : One of these is not a weighted Aggregate method

Answer: Karl Pearson's Price Index

Question MCQ38 : Below are Uses of Index Number except

Answer: Use to measure sick people

Question MCQ39 : Data can be classified into two major sources from which they are obtained

Answer: Primary and Secondary data

Question MCQ40 : The following are disadvantages of primary data except

Answer: Less accurate

Question MCQ41 : The following are advantages secondary data except

Answer: Accurate and Reliable

Question MCQ42 : Data are also classified based on the form except

Answer: Primary Data

Question MCQ43 : _____ combine the features of cross-sectional and time-series data.

Answer: Panel Data

Question MCQ44 : The Sources of Secondary data are as follows except

Answer: Household Survey

Question MCQ45 : Below are some publications in Nigeria except

Answer: Daily Consumption of Beans

Question MCQ46 : Researchers collect data in order to test _____ and to provide empirical support for explanations and predictions.

Answer: Hypotheses

Question MCQ47 : Sub-set of population is called?

Answer: Sample

Question MCQ48 : A particular value of the population, such as the mean income or the level of formal education, is called

Answer: A parameter

Question MCQ49 : Below are the functions of money except

Answer: Portability

Question MCQ50 : To accurately estimate unknown parameters from known statistics, researchers have to effectively deal with one of these problems:

Answer: The size of the sample

Question FBQ1 : A _____ random variable is the simplest random variable.

Answer: Bernoulli

Question FBQ2 : A Bernoulli process is a _____ or infinite sequence of binary random variable

Answer: finite

Question FBQ3 : Several random variables and probability distributions beside the _____ itself may be derived from the Bernoulli process

Answer: Bernoulli

Question FBQ4 : The negative Binomial variables may be interpreted as _____ waiting times

Answer: random

Question FBQ5 : A Bernoulli random variable is one which has only _____ and 1 as possible values.

Answer: 0

Question FBQ6 : A Bernoulli random variable is the simplest random variable. It models an experiment in which there are only two outcomes. Generically, we say that $X=1$ is a success and $X=0$ is a failure. We say that p is the _____ probability.

Answer: Success

Question FBQ7 : _____ the probability of success is constant for each trial. Then $q = 1-p$, is the probability of failure in any trial.

Answer: p

Question FBQ8 : $P(r) = P(X = \text{_____})$

Answer: r

Question FBQ9 :

Since these probabilities are the successive terms in the Binomial expansion $(q + p)^n$, it is called the _____ distribution

Answer: Binomial

Question FBQ10 : Total probability is _____

Answer: 1

Question FBQ11 : The normal distribution with _____ is referred to as the standard _____ distribution.

Answer: normal

Question FBQ12 : If X has a normal distribution with the _____ of $\hat{\mu}$ and the

deviation _____, then is the standard normal distribution,

Answer: mean

Question FBQ13 : Poisson distribution may be obtained as a limiting case of _____ probability distribution under the following conditions

Answer: binomial

Question FBQ14 : The *critical region* of a hypothesis test is the set of all outcomes which cause the null hypothesis to be rejected in favour of the _____

hypothesis.

Answer: alternative

Question FBQ15 : Statistical hypothesis testing is sometimes called _____ data

a n a l y s i s
Answer: confirmatory

Question FBQ16 : Common test Statistics are; t-test, z-test, chi-square test and f-test which is sometimes referred to as analysis of _____ test
Answer: variance

Question FBQ17 : *t*-test for the significance of single mean, population variance being unknown. True or False? _____
Answer: True

Question FBQ18 : One of the assumptions for Student's *t*-test: The parent population from which the sample is drawn is not normal. True or False _____
Answer: False

Question FBQ19 : The sampling distribution of F-statistics does not involve any population parameters and depends only on the degrees of freedom n_1 and n_2 . True or False _____.
Answer: True

Question FBQ20 : _____ of fit and is used to test if the deviation between observation and goodness
Answer: goodness

Question FBQ21 : Under the null hypothesis that there is no significant difference between the observed and the _____ values.
Answer: hypothetical

Question FBQ22 : Karl _____ proved that the statistic is Pearson
Answer: Pearson

Question FBQ23 : In statistics, the term non-parametric statistics refers to statistics that do not assume the data or population have any characteristic structure or _____ parameters.
Answer: parameters

Question FBQ24 : Non-parametric models differ from parametric models in that the model structure is not specified a _____ but is instead determined from d a t a .
Answer: priori

Question FBQ25 : The most frequently used tests include Kruskal- _____ one-way analysis of variance by _____ ranks
Answer: Wallis

Question FBQ26 : Spearman's _____ correlation coefficient: measures statistical dependence between two variables using a monotonic function
Answer: Rank

Question FBQ27 : _____ signed-rank test: tests whether matched pair samples are drawn from populations with different mean ranks
Answer: Wilcoxon

Question FBQ28 : Suppose we are interested in testing $H_0: P(+) = P(-)$ $H_1: P(+) \neq P(-)$
Answer: _____

Question FBQ29 : Correlation provides an estimate of the relationship between _____ measurements, without any assumption of whether one comes before the other.
Answer: Two

Question FBQ30 : Correlation coefficients have a value between _____ and +1.

Answer: -1

Question FBQ31 : The correlation measures only the _____ of linear association between two variables while regression analysis is a statistical process for estimating the relationships among variables.
Answer: degree

Question FBQ32 : Correlation is said to be positive when the values of two variables deviate in the opposite direction. True or False
Answer: False

Question FBQ33 : Correlation is said to be negative when the values of two variables deviate in the same direction. True or False
Answer: False

Question FBQ34 : Mutual dependence is the situation when the phenomena under study inter-influence each other. True OR False
Answer: True

Question FBQ35 : Given two variables X and Y: If $r = +1$, there is a perfect direct relationship between Y and X. If $r = -1$, there is a perfect inverse or negative relationship between Y and X. If $r =$ _____ there is no relationship between Y and X.
Answer: 0

Question FBQ36 : One of the assumptions order to use the Pearson product-moment correlation: The measures are approximately normally distributed
True or False
Answer: _____?

Answer: True

Question FBQ37 : In regression analysis there are _____ types of variables.

Answer: two

Question FBQ38 : Typical regression model is specified in form of $Y = a + bX + e$.

Question FBQ39 : Independent Variable is the variable which influences the value of the _____ variable or which is used for prediction.

Answer: dependent

Question FBQ40 : A more accurate way of finding the line of best fit is the least square method.

True OR False ?

Question FBQ41 : Central limit theorem states that given a sufficiently large sample size from a population with a finite level of variance, the mean of all samples from the same population will be approximately equal to the mean of the population.

True OR False ?

Answer: True

Question FBQ42 : Let us suppose that Y_1, Y_2, Y_n, \dots , are independent and identically distributed with _____ and finite variance σ^2 .

Answer: Mean

Question FBQ43 : The CLT can tell us about the distribution of large sums of random variables even if the distribution of the random variables is almost _____.

Answer: Unknown

Question FBQ44 : The central limit theorem applies in particular to sums of independent and _____ distributed discrete random variables.

Answer: identically

Question FBQ45 : A random orthogonal matrix is said to be distributed uniformly, if its distribution is the not normalized Haar measure on the orthogonal group $O(n, R)$.

True or False ?

Answer: False

Question FBQ46 : A linear function of a matrix M is a linear combination of its

elements (with given coefficients), _____ is the matrix of the coefficients.

True or False ?

Answer: True

Question FBQ47 : Laspeyres's Price Index or Base year method is a Weighted Aggregate Method. True or False _____?

Answer: True

Question FBQ48 : Fisher's Price Index "Irving Fisher advocated the geometric cross of Laspeyres's and _____ Price index numbers.

Answer: Paasche's

Question FBQ49 : Data can be classified base on the sources from which they are obtained into primary and _____

Answer: Secondary

Question FBQ50 : A sample is any subset of sampling units from a population. True or False _____?

Answer: True