MCQ1: What is the probability of any specific, infinitely long sequence of coin?
Answer: zero

MCQ2: In an experiment of a single toss of a coin, the coin might come up heads with probability P and tails with probability 1-P. The experiment is called fair if,

_____
Answer: P=0.5

MCQ3: Find the probability of getting 5 in a single throw of a dice.
Answer: one -sixth

MCQ4: The outcome of the random experiment (trial) results in the _____ classification of events.
Answer: Dichotomous

MCQ5: Using normal tables, find the values of P(z < 0.50)Â
Answer: 0.6915Â

MCQ6: Which is termed as the probability of failure (non-occurrence of the event) and is constant for each trial?
Answer: q = 1-p

MCQ7: What is the probability of getting heads in two coins flipps?
Answer: 0.75

MCQ8: In a normal distribution, the mode which is the point on the horizontal axis where the curve is a maximum occurs at _____
Answer: X = Î¼

MCQ9: The normal distribution was first discovered by English Mathematician De-voire in _____
Answer: 1733

MCQ10: In normal distribution, the curve is _____ about a vertical axis through the mean Î¼
Answer: asymmetric

MCQ11: The first meaning of non-parametric covers _____ that do not rely on data belonging to any particular distribution.
Answer: techniques

MCQ12: A _____ is a succession of identical letters (or other kinds of symbol) which is preceded and followed by different letters or no letters at all.
Answer: Run

MCQ13: Correlation coefficients have a value between _____
Answer: -1 and +1

MCQ14: Which of the following is not an example of negative correlation?

Answer:
age and marriage
Â Â

MCQ15: If x: 1 2 3 4 5 and y:2 5 8 11 14, then this relationship can be expressed as _____
Answer: y = 2+3x

MCQ16: Let the variance of each Xi be Ïƒ2. It then follows from the Chebyshevâ€™s inequality that for every number _____
Answer: Îµ >0

MCQ17: A Bernoulli process is a finite or infinite sequence of _____ random variableÂ
Answer: Binary

MCQ18: A Bernoulli process is also a _____ stochastic process Â

Â Â
Answer: discrete- time

MCQ19: The component Bernoulli variables Xi are identical and _____
Â
Â
Â
Â Â
Answer: Independent

MCQ20: The two possible values of each Xi are often called _____
Answer: "successâ€□ and "failure"

MCQ21: The total area under the curve and above the horizontal axis is equal to _____Â
Answer: 1

MCQ22: Ten cartons are taken at random from an automatic filling machine. The mean net weight of the 10 cartons is 11.8kg and standard deviation is 0.15kg. Does the sample mean differ significantly from the intended weight of 12kg? Note that Î±=0.05Â
Answer: Yes

MCQ23: Given a normal distribution with mean of 230 and standard deviation of 20, what is the probability that an observation from this population is Less than 220?
Answer: 0.3085

MCQ24: The _____ of a hypothesis test is the set of all outcomes which cause the null hypothesis to be rejected in favour of the alternative hypothesis.
Â

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Â Â
Answer: critical region

MCQ25: Statistical hypothesis testing is sometimes called _____ data analysis.
Answer: Confirmatory

MCQ26: Another name for f-test is _____
Â
Â
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Â Â
Answer: ANOVA

MCQ27: Two variables are said to be linearly related if they have a relationship of the form _____
Â
Â
Â
Â Â
Answer: y = a+bx

MCQ28: Another name for ANOVA is _____
Â
Â
Â
Â Â
Answer: f-test

MCQ29: One may observe a high degree of correlation between the height and intelligence in a group of people. Such correlation is called _____ correlation.
Â
Â
Â
Â Â
Answer: spurious or non-senseÂ

MCQ30: _____ is not one of the methods of studying correlation
Â
Â
Â Â
Answer: Scatter Table method

MCQ31: Given two variables X and Y: If r = -1, there is a perfect _____ relationship between Y and X.
Answer: inverse or negative

MCQ32: A coin is tossed thrice, so what is the probability of getting at least one tail?
Answer: 0.875

MCQ33: The assumptions for Studentâ€™s test do not include _____
Answer: The population standard deviation Î¶ is knownÂ

MCQ34: Prices of shares of a company on the different days in a month were found to be: 76, 75, 79, 70, 79, 81, 80, 73, 74 and 78. What is the mean price of the price of the shares in the month?Â
Answer: 76.5Â

MCQ35: F-statistic is the ratio of _____ chi-square variates divided by their respective degrees of freedom
Answer: two independent

MCQ36: Typical regression model is specified in form of_____
Â
Â
Â
Â Â
Answer: Y = a + bX + e

MCQ37: The best fit line can be given as _____
Â
Â
Â
Â Â
Answer: y = a + bx

MCQ38: _____ is NOT one of the ways to evaluate the reliability of a linear regression model
Answer: the econometric confidence interval

MCQ39: A particular value of the population, such as the mean income or the level of formal education, is called a_____
Answer: parameter

MCQ40: Another name for standard error is _____
Â
Â
Â Â
Answer: error margin

MCQ41: The component Bernoulli variables Xi are _____and independent. Â
Answer: identical

MCQ42: . A numerical value used as a summary measure for a sample, such as sample mean, is known as a _____.
Answer: Sample statisticÂ

MCQ43: The sum of the percent frequencies for all classes will always equal _____.
Answer: 100

MCQ44: The following data show the number of hours worked by 150 statistics students.Â
Number of Hours
Frequency
0-9
30
10-19
40
20-29
40
30-39
40What is the class width for this distribution?
Answer: 10

MCQ45: What is the opposite of confirmatory data analysis?
Answer: Exploratory data analysis

MCQ46: The term Analysis of Variance was introduced by Prof. R.A Fisher in 1920s to deal with problems in the analysis of _____data.
Answer: Agronomical

MCQ47: Non-parametric methods are widely used for studying populations that take on a _____ order
Answer: ranked

MCQ48: In terms of levels of measurement, non-parametric methods result in _____ data
Answer: ordinal

MCQ49: Spearman's rank correlation coefficient: measures statistical dependence between two variables using a _____function
Answer: monotonic

MCQ50: The negative Binomial variables may be interpreted as _____ waiting times.
Answer: random

FBQ1: Since the calculated F is less than tabulated F, it is not significant. Hence, Ho may be _____ at 5% level of significance or risk level.Ã
Answer: Accepted Â

FBQ2: On the other hand, if calculated value of Ï‡2 is greater than the tabulated value, it is said to be_____.Â
Answer: significant

FBQ3: The variation due to assignable causes can be detected and _____ whereas the variation due to chances is beyond the control of human and cannot be traced separately.
Answer: Measured

FBQ4: The main objective of the analysis of variance technique is to examine if there is significant difference between the class _____ in view of the inherent variability within the separate classes.
Answer: means

FBQ5: To obtain the variation between samples, we compute the sum of the _____ of the deviations of the various sample means from the overall (grand) mean.Â
Answer: square Â

FBQ6: ANOVA is very useful in the multiple comparison of mean among other important uses in both social and applied _____.Â
Answer: sciences

FBQ7: The outcome of the _____ experiment (trial) results in the dichotomous classification of events.Â
Answer: random

FBQ8: Non-parametric methods are widely used for studying _____ that take on a ranked order (such as movie reviews receiving one to four stars).Â
Answer: populations

FBQ9: The _____ or the Kruskal-Wallis Test is usually based on large sample theory that the sampling distribution of H can be closely approximated with a chi-square distribution with k-1 degree of Â- freedom.
Answer: H-Test Â

FBQ10: A _____ coefficient means that x and y values increases and decrease in the same direction.
Answer: positive

FBQ11: The correlation measures only the degree of linear association between two variables while regression analysis is a statistical process for estimating the _____ among variables.Â
Answer: relationships

FBQ12: Regression Â-_____ is a mathematical measure of the average relationship between one or more variables in terms of the original units of the data.Â
Answer: Analysis

FBQ13: The convergence to the normal distribution is _____, in the sense that the entropy of Zn increases monotonically to that of the normal distribution.Â
Answer: monotonic

FBQ14: The law of large numbers says that the sample mean of a random sample converges in probability to the mean Î¼ of the individual random variables, if the _____ exists.Â
Answer: variance

FBQ15: Kendall's W: a measure between 0 and 1 of inter-rater _____.
Answer: agreement

FBQ16: Kaplanâ€“Meier: estimates the _____function from lifetime data, modelling censoring
Answer: survival

FBQ17: Correlation coefficients have a value between -1 and_____.
Answer: +1

FBQ18: Coefficient of _____ means x and y are associated randomly.
Answer: 0

FBQ19: Irving Fisher advocated the _____ cross of Laspeyreâ€˜s and Paascheâ€˜s Price index numbers
Answer: geometric

FBQ20: The Bernoulli process can be formalized in the language of _____ spaces as a random sequence of independent realisations of a random variable that can take values of heads or tails.Â
Answer: probability Â

FBQ21: These sets of finite _____ are referred to as cylinder sets in the product topology.Â
Answer: sequences Â

FBQ22: In the Binomial distribution, the outcome of the random experiment (trial) results in the _____ classification of events.
Answer: dichotomous

FBQ23: If we toss a fair coin n times (which is fixed and finite) then the outcome of any trial is one of the _____ exclusive events, viz., head (success) and tail (failure).Â
Answer: mutually

FBQ24: The normal curve approaches the _____ axis asymptotically as we proceed in either direction away from the mean.
Answer: horizontal

FBQ25: In statistics, a result is interpreted as being statistically significant if it has been

predicted as unlikely to have occurred by _____ alone, according to a pre-determined threshold probability, the significance level.Â
Answer: chance

FBQ26: The outcomes region of a hypothesis test is the set of all outcomes which cause the null hypothesis to be rejected in favour of the _____ hypothesis.Â
Answer: alternative Â

FBQ27: F-statistic is the ratio of two_____ chi-square variates divided by their respective degrees of freedom.Â
Answer: Independent

FBQ28: An important example of a log-concave density is a function constant inside a given convex body and _____ outside.Â
Answer: vanishing

FBQ29: The condition f(x1, â€¦, xn) = f(|x1|, â€¦, |xn|) ensures that X1, â€¦, Xn are of zero mean and uncorrelated; still, they need not be independent, nor even _____ independent.Â
Answer: pairwise

FBQ30: The _____ of a product is simply the sum of the logarithms of the factors.Â
Answer: logarithm Â

FBQ31: The logarithm of a product is simply the _____ of the logarithms of the factors
Answer: sum

FBQ32: Because a normal curve is symmetrical about its mean, P(z < -a) = P(z > a) and P(z < a) + P(z > a) = _____Â
Answer: 1 Â

FBQ33: If you are investigating consumer behaviour in a particular city, you might define the population as all the _____ in that city
Answer: households

FBQ34: Chi-square distribution has a number of applications, one of which is to test the equality of several _____ proportions
Answer: sample

FBQ35: If the calculated Ï‡2 value is 57.97 and the tabulated value of Ï‡2(r-1)(s-1) = 12. 59 (critical value), then decision is _____
Answer: reject Ho

FBQ36: The variation due to _____ is beyond the control of human and cannot be traced separately.
Answer: chances

FBQ37: The Problem of determining the process, given only a limited sample of the bernoulli trials, may be called the problem of checking if a coin is .....
Answer: fair

FBQ38: The two possible values of each Xi are often called "success" and "failure". Thus, when expressed as a number 0 or 1, the outcome may be called the number of successes on the ith _____.Â
Answer: trial

FBQ39: The Bernoulli process can be formalized in the language of _____ spaces as a random sequence of independent realisations of a random variable that can take values of heads or tails.
Answer: Probability

FBQ40: The normal distribution was first discovered by English Mathematician De-voire (1667-1754) in 1733 who obtained the mathematical equation for this distribution while dealing with problems arising in the game of _____.
Answer: Chance

FBQ41: The normal distribution with Î¼ = 0 and Î¶ = _____ is referred to as the standard normal distribution.Â
Answer: 1

FBQ42: The condition under which Poisson distribution is obtained is in a _____ case of Binomial Distribution.
Answer: limiting

FBQ43: The critical region of a hypothesis test is the set of all outcomes which cause the null hypothesis to be _____ in favour of the alternative hypothesis.Â
Answer: rejected

FBQ44: The parent _____from which the sample is drawn is normal
Answer: Population

FBQ45: Since the calculated F is _____ than tabulated F, it is not significant.
Answer: Less

FBQ46: A particular value of the sample, such as the mean income or the level of formal education, is called a _____.Â
Answer: statistic

FBQ47: There are three methods of data collection with survey and these are the following. These are mail questionnaires, personal interviews and _____ interviews.
Answer: telephone

FBQ48: The probability of getting a head in a single toss of a coin is _____.
Â
Â

Â
4Â
Answer: 0.5

FBQ49: _____ is termed as the probability of failure (non-occurrence of the event) and is constant for each trial
Â
Â
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Â Â
Answer: q = 1-p

FBQ50: Â For the Binomial Distribution; Mean=np; and Variance = _____
Â
Â
Â
Â Â
Answer: npq