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When each outcome of a sample space has equal chance to occur as any other, the outcomes are called:

Answer (Please select your correct option)

○ Mutually exclusive

○ Equally likely

○ Not mutually exclusive

○ Exhaustive

When each outcome of a sample space has equal chance to occur as any other, the outcomes are called:

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Start Time: 9:48 AM

An expected value of a random variable is equal to:

Answer (Please select your correct option)

○ Variance

○ Mean

○ Standard deviation

○ Covariance

Start Time: 9:48 AM

When f(x) is continuous probability function, then P(X = 1) is:

Answer (Please select your correct option)

○ 1

○ ∞

○ $-\infty$

○ 0

Start Time: 9:48 AM

The sum of deviations is zero, when deviations are taken from:

Answer (Please select your correct option)

○ Mean

○ Median

○ Mode

○ H.M

Start Time: 9:48 AM

The distribution function F(x) is equal to

○ $P(X = x)$

○ $P(X \leq x)$

○ $P(X \geq x)$

○ $P(X > x)$

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Start Time: 9:48 AM

In a one-way ANOVA:

Answer (Please select your correct option)

○ The interaction term has (c - 1)(n - 1) degrees of freedom

○ An interaction term is given

○ An interaction effect can be tested

○ There is no interaction term

Start Time: 9:48 AM

The degrees of freedom for a t-test with sample size 'n' is:

Answer (Please select your correct option)

○ n-1

○ n+1

○ n-2

○ n+2

Start Time: 9:48 AM

Rumour has reached the Trading Standards Officer that the manufacturer ABC is deliberately underfilling his cartons of orange juice. It is decided that a sample should be taken to check this claim. The stated contents on the carton are 100 ml on the average, then the null hypothesis is:

Answer (Please select your correct option)

○ $H_0 : \mu = 100$

○ $H_0 : \mu > 100$

○ $H_0 : \mu < 100$

○ $H_0 : \mu \neq 100$

Start Time: 9:48 AM

When c is a constant, then E(c) is:

0

1

c

-c

Start Time: 9:48 AM

The combined distribution of more than two random variables is:

○ Univariate distribution

○ Joint distribution

○ Marginal distribution

○ Bivariate distribution

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Start Time: 9:48 AM

The test statistic used in analysis of variance procedure follow the :

Answer (Please select your correct option)

○ χ^2 -distribution.

○ T-distribution.

○ Z-distribution.

○ F-distribution.

Start Time: 9:48 AM

In normal distribution $\beta_2 = \ldots\ldots :$

Answer (Please select your correct option)

1

2

3

0

Start Time: 9:48 AM

In normal distribution, the quartile deviation Q.D = ... :

Answer (Please select your correct option)

- 0.5σ

- 0.75σ

- 0.7979σ

- 0.6745σ

Start Time: 9:48 AM

In a symmetrical distribution, the coefficient of skewness is equal to :

Answer (Please select your correct option)

○ -1

○ +1

○ 0

○ 2

Start Time: 9:48 AM

The average which is defined as the reciprocal of the arithmetic mean of the reciprocals of the values is called:

Answer (Please select your correct option)

○ Geometric Mean

○ Harmonic Mean

○ Mode

○ Median

Start Time: 9:48 AM

Which measure of dispersion is used to compare the variation of two data sets?

Answer (Please select your correct option)

Coefficient of variation

Coefficient of comparison

Mean deviation

Standard deviation

Start Time: 9:48 AM

If S.D$(X) = 5$ then S.D$(\frac{2X + 5}{2}) = $ _____

Answer (Please select your correct option)

○ 5

○ 10

○ 15

○ 7.5

Start Time: 9:48 AM

The deviation of a distribution from symmetry is called:

Answer (Please select your correct option)

○ Kurtosis

○ Skewness

○ Dispersion

○ Flatness

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Start Time: 9:48 AM

The conditional probability function $f(x|1) =$ _____

Answer (Please select your correct option)

○ $f(1,1)$

○ $f(x,1)$

○ $\dfrac{f(x,1)}{h(1)}$

○ $\dfrac{f(x,1)}{h(x)}$

Start Time: 0:48 AM

Which one is the correct formula to find the desired sample size?

Answer (Please select your correct option)

○ $n = \left(\dfrac{Z_{\alpha/2} \cdot \sigma}{e} \right)^2$

○ $n = \left(\dfrac{Z_{\alpha/2} \cdot \sqrt{\sigma}}{e} \right)^2$

○ $n = \left(\dfrac{Z_{\alpha/2} \cdot \bar{X}}{e} \right)^2$

○ $n = \dfrac{Z_{\alpha/2} \cdot \sigma}{e}$

Start Time: 9:48 AM

A deserving player is not selected in the team is an example of:

Answer (Please select your correct option)

○ Type I error

○ Type II error

○ Correct decision

○ No information regarding this

Start Time: 9:48 AM

A judge can acquit a guilty person is the example of:

Answer (Please select your correct option)

○ Type I error

○ Type II error

○ Correct decision   *not sure*

○ No information regarding this

Start Time: 9:48 AM

Ideally, the width of confidence interval should be:

Answer (Please select your correct option)

○ 0

○ 1

○ 99

○ 100

Start Time: 9:48 AM

If the sampling distribution of $\bar{X}$ is normal, we would expect 99% of the sample means to be within the interval:

Answer (Please select your correct option)

○ $\mu_{\bar{x}} \pm 2\sigma_{\bar{x}}$

○ $\mu_{\bar{x}} \pm 1.96\sigma_{\bar{x}}$

○ $\mu_{\bar{x}} \pm 2.58\sigma_{\bar{x}}$

○ $\mu_{\bar{x}} \pm \sigma_{\bar{x}}$

Start Time: 9:48 AM

If mean of χ^2 distribution is k then variance will be:

Answer (Please select your correct option)

○ k^2

○ 2k

○ 1/k

○ k

Mean of the F-distribution is possible only, when

$v_1 > 2$

$v_2 > 2$

$v_1 < 2$

$v_2 < 2$

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Start Time: 9:48 AM

In Statistics, we have MSE which is abbreviation of:

Answer (Please select your correct option)

○ Mean square error

○ Measured square error

○ Medical screening exam

○ Major sampling error

Start Time: 9:48 AM

What is the graphical shape of the chi-square distribution?

Answer (Please select your correct option)

○ Positively skewed

○ Negatively skewed

○ Uniformly distributed

○ Normally distributed

Start Time: 9:48 AM

As the degree of freedom increases, the t-distribution tends to coincide with:

Answer (Please select your correct option)

○ Binomial distribution

○ Uniform distribution

○ Hypergeometric distribution

○ Normal distribution

Start Time: 9:48 AM

If X and Y are independent variables, then E (XY) is:

Answer (Please select your correct option)

- E(XX)

- E(X).E(Y)

- X.E(Y)

- Y.E(X)

Start Time: 9:48 AM

What are the number of ways in which four books can be arranged on a shelf?

Answer (Please select your correct option)

4

6

12

24

Start Time: 9:48 AM

The parameters of the binomial distribution b(x; n, p) are:

Answer (Please select your correct option)

○ x & n

○ x & p

○ n & p

○ x, n & p

Start Time: 9:48 AM

Hypergeometric probability distribution has :

Answer (Please select your correct option)

○ (n, k) parameter

○ (N) parameter

○ (N, n, N-k) parameter

○ (N ,n, k) parameter

Start Time: 9:48 AM

The variance of the hypergeometric probability distribution is:

Answer (Please select your correct option)

○ $\sigma^2 = n\dfrac{k}{N}$

○ $\sigma^2 = n\dfrac{k}{N}\dfrac{N-k}{N}\dfrac{N-n}{N-1}$,

○ $\sigma^2 = npq$

○ $\sigma^2 = N\dfrac{n}{K}$

Start Time: 9:48 AM

When f(x) is continuous probability function for $1 < X < 5$, then P (X < 1) is:

Answer (Please select your correct option)

○ 0

○ 0.25

○ 0.5

○ 1

Start Time: 9:48 AM

For any two estimators T1 and T2, if VAR(T1) < VAR(T2), then T1 is:

Answer (Please select your correct option)

VuAnswers.com

- ○ Unbaised

- ○ Sufficient

- ○ Efficient

- ○ Consistent

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Start Time: 9:48 AM

If an estimator gets closer to the population parameter by increasing sample size then it is known as:

Answer (Please select your correct option)

Consistent estimator

Sufficient estimator

Efficient estimator

Unbiased estimator

Start Time: 9:48 AM

Which of the following comes first to make frequency distribution.

Answer (Please select your correct option)

○ Number of Groups

○ Class interval

○ Range

○ Tally marks

Start Time: 9:48 AM

What curve shape would you expect for the distribution of death rates of population of all age groups?

Answer (Please select your correct option)

○ Symmetrical curve

○ Skewed to the right

○ Skewed to the left

○ U shape curve

Start Time: 9:48 AM

Which one is the measure of central tendency:

Answer (Please select your correct option)

○ Variation of the distribution

○ Average of the distribution

○ Scatterness of the distribution

○ Dispersion of the distribution

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Start Time: 9:48 AM

The parameter of the chi- square distribution is.......

Answer (Please select your correct option)

○ v

○ $v-1$

○ $v-2$

○ $v-p$

The mean of the F-distribution is:

Answer (Please select your correct option)

VuAnswers.com

○ $\dfrac{v_1}{v_1 - 2}$ $\quad for v_1 \rangle 2$

○ $\dfrac{v_2}{v_2 - 2}$ $\quad for v_2 \rangle 2$

○ $\dfrac{v_1}{v_1 - 2}$ $\quad for v_1 \geq 2$

○ $\dfrac{v_2}{v_2 - 2}$ $\quad for v_1 \leq 2$

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The F-distribution always ranges from:

Answer (Please select your correct option)

○ 0 to 1

○ 0 to $-\infty$

○ $-\infty$ to $+\infty$

○ 0 to $+\infty$

An expected value of a random variable is equal to:

Answer (Please select your correct option)

VuAnswers.com

○ Variance

○ Mean

○ Standard deviation

○ Covariance

Made by: Waqar Siddhu

When f(x) is continuous probability function, then $P(X = 1)$ is:

Answer (Please select your correct option)

○ 1

○ ∞

○ $-\infty$

○ 0

Rumour has reached the Trading Standards Officer that the manufacturer ABC is deliberately underfilling his cartons of orange juice. It is decided that a sample should be taken to check this claim. The stated contents on the carton are 100 ml on the average, then the alternative hypothesis is:

Answer (Please select your correct option)

VuAnswers.com

○ $H_1 : \mu = 100$

○ $H_1 : \mu > 100$

○ $H_1 : \mu < 100$

○ $H_1 : \mu \neq 100$

Which of the following is a characteristics of the normal distribution:

Answer (Please select your correct option)

○ It is a skewed distribution

○ It is bell-shaped

○ It is not asymptotic

○ It is leptokurtic

For the given poisson distribution $P(X = 1) = \dfrac{e^{-0.135} 0.135^1}{1!}$ the mean value is :

Answer (Please select your correct option)

○ $e^{-0.135}$

○ -0.135

○ 0.135 ✓

○ 1

In normal distribution β_2 = ...:

Answer (Please select your correct option)

○ 1

○ 2

○ 3

○ 0

In normal distribution, the quartile deviation Q.D = ... :

Answer (Please select your correct option)

○ 0.5σ

○ 0.75σ

○ 0.7979σ

○ 0.6745σ

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A good way to get a small standard error is to use a _____.

Answer (Please select your correct option)

○ Repeated sampling

○ Small sample

○ Large sample

○ Large population

logical quiez not sure

mind it not sure

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The difference between the largest and the smallest data values is called the

$$xm-x0$$

Answer (Please select your correct option)

- ○ Variance

$$xm=max\ rane\quad x0=$$
$$min\ range$$

- ○ Interquartile range

- ○ Range

- ○ Coefficient of variation

Which is appropriate average for finding the average speed of a car:

Answer (Please select your correct option)

○ Mean

○ Geometric mean

○ Harmonic mean

○ Weighted mean

Which one is the formula of mid range:

Answer (Please select your correct option)

○ $x_m - x_0$

○ $x_0 - x_m$

○ $\dfrac{x_0 - x_m}{2}$

○ $\dfrac{x_0 + x_m}{2}$

Which one of the following is a meso-kurtic curve?

Answer (Please select your correct option)

○ Negatively skewed

○ Positively skewed

○ J-shaped

○ Normal

If you draw all possible samples from some population, calculate the mean for each of the sample and construct the probability distribution of the sample means, what would you have?

Answer (Please select your correct option)

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○ A population distribution

Logical not sure

○ A sample distribution

○ A sampling distribution

○ A parameter distribution

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By definition $f(y \mid x) =$ _____

Answer (Please select your correct option)

○ $f(y)$

○ $f(x,y)$

○ $\dfrac{f(x,y)}{h(x)}$

○ $\dfrac{f(x,y)}{h(y)}$

The critical region for $H_1 : \mu > \mu_0$ when $\alpha = 0.01$ is:

not sure

VuAnswers.com

Answer (Please select your correct option)

- $z > z_{0.01}$

- $|z| > z_{0.01}$

- $z < -z_{0.05}$

- $|z| > z_{0.05}$

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For degree of freedom $\nu > 2$ the variance of t-distribution is always:

Answer (Please select your correct option)

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○ Greater than zero

○ Less than one

○ Equal to one

○ Greater than one

Made by: Waqar Siddhu

Ideally, the width of confidence interval should be:

Answer (Please select your correct option)

○ 0

○ 1

○ 99

○ 100

If the sampling distribution of $\bar{X}$ is normal, we would expect 99% of the sample means to be within the interval:

Answer (Please select your correct option)

○ $\mu_{\bar{x}} \pm 2\sigma_{\bar{x}}$

○ $\mu_{\bar{x}} \pm 1.96\sigma_{\bar{x}}$

○ $\mu_{\bar{x}} \pm 2.58\sigma_{\bar{x}}$

○ $\mu_{\bar{x}} \pm \sigma_{\bar{x}}$

Which one of the formula will be used to find out the confidence interval for μ, when population variance unknown and sample size is large?

Answer (Please select your correct option)

○ $\bar{x} \pm Z_{\alpha/2} \dfrac{s}{\sqrt{n}}$

○ $\bar{x} \pm t_{\alpha/2(v)} \dfrac{s}{\sqrt{n}}$

○ $\bar{x} \pm t_{\alpha/2(v)} \dfrac{\sigma}{\sqrt{n}}$

○ $\bar{x} \pm Z_{\alpha/2} \dfrac{s}{\sqrt{n-1}}$

If $\bar{X}$ is the mean of the n observations, then which test statistic will be used to calculate the confidence limits of the population variance σ^2 ?

Answer (Please select your correct option)

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○ Z-statistic

○ T-statistic

○ χ^2-statistics

○ F-statistics

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In Statistics, we have MSE which is abbreviation of:

Answer (Please select your correct option)

Mean square error

Measured square error

Medical screening exam

Major sampling error

In the test of goodness of fit, the _____ is used as a test statistic.

Answer (Please select your correct option)

○ F

○ t

○ Z

○ χ^2

If there are 8 treatments with 6 blocks in a randomized completed block design then what are the degrees of freedom for treatments?

$v = n - 1$

v repersent the

degree of fredom

VuAnswers.com

Answer (Please select your correct option)

- 5
- 4
- 6
- 7

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What factor determines the shape of the t-distribution?

Answer (Please select your correct option)

VuAnswers.com

○ Degree of freedom

○ Critical value

○ Frequency of data

○ Probability

Made by: Waqar Siddhu

If X and Y are random variables, then $E(X - Y)$ is equal to:

Answer (Please select your correct option)

○ $E(X) + E(Y)$

○ $E(X) - E(Y)$

○ $X - E(Y)$

○ $E(X) - Y$

Two continuous r.v.'s X and Y are said to be independent if and only if :

Answer (Please select your correct option)

VuAnswers.com

○ $f(x,y) = g(x) \, h(y)$

○ $f(x,y) \neq g(x) \, h(y)$

○ $f(x,y) > g(x) \, h(y)$

○ $f(x,y) < g(x) \, h(y)$

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The lottery tickets issued for the purpose of money-making follows a:

Answer (Please select your correct option)

○ Normal distribution

○ Discrete uniform distribution

○ Binomial distribution

○ Hypergeometric distribution

Uniform distribution is defined by:

Answer (Please select your correct option)

○ Largest value

○ Largest and smallest value

○ Smallest value

○ Central value

If an estimator gets closer to the population parameter by increasing sample size then it is known as:

Answer (Please select your correct option)

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- Consistent estimator

- Sufficient estimator

- Efficient estimator

- Unbiased estimator

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Quantitative variable is further divided into:

Answer (Please select your correct option)

○ Continuous variable

○ Discrete variable

○ Continuous & Discrete variable

○ None of the above

Color of the dress is the example of:

Answer (Please select your correct option)

VuAnswers.com

○ Qualitative data

○ Quantitative data

○ Continuous data

○ Discrete data

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Which one is commonly called a bell shaped distribution?

Answer (Please select your correct option)

○ Symmetrical

○ Bimodal

○ Skewed

○ U shaped

A fair coin is tossed three times, the probability that at least one head appear is:

Answer (Please select your correct option)

○   1/2

○   1/8

○   6/8

○   7/8

The probability of simultaneous occurrence of two events is called:

Answer (Please select your correct option)

○ Subjective probability

○ Conditional probability

○ Joint probability

○ Prior probability

What is the stem part of 243:

Answer (Please select your correct option)

○ 3

○ 43

○ 23

○ 24

A numerical value used as a summary measure for a sample, such as sample mean, is known as a :

Answer (Please select your correct option)

○ Population Parameter

○ Sample Parameter

○ Sample Statistic

○ Population mean

Given the series 1,2,1,1,2,2,2,2,3,4,5,3,2,3,1,4,2,3. Which one of the following is mode of the given seires:

Answer (Please select your correct option)

- ○ 4

- ○ 3
  3

- ○ 2
  3
  2

- ○ 1
  3
  2*

P (A or B) =P (A) +P (B), then A and B are:

Answer (Please select your correct option)

- ● Mutually exclusive events

- ○ Independent events

- ○ Exhaustive events

- ○ Equally likely events

First moment about origin is always equals to:

Answer (Please select your correct option)

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○ Mean

○ Variance

○ Standard Deviation

● Zero

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$E(4X + 5) =$ _____

Answer (Please select your correct option)

- 16 E (X)
- 16 E (X) + 5
- 12 E (X)
- 4 E (X) + 5

When two coins are tossed the probability of at least one head is:

Answer (Please select your correct option)

○ 1/4

● 3/4

○ 2/4

○ 4/4

If σ^2 is unknown, then we use Z-test if the sample size is:

Answer (Please select your correct option)

$n \geq 30$

n<30

n=25

n=20

When a coin is tossed 3 times, the probability of 3 tails is:

Answer (Please select your correct option)

- ● 1/8

- ○ 2/4

- ○ 3/8

- ○ 2/8

The F-distribution has ...... parameter.

Answer (Please select your correct option)

○ One

○ No

● Two

○ Three

Which one of the following provides the basis for hypothesis testing?

Answer (Please select your correct option)

O   Null hypothesis

O   Alternative hypothesis

O   Critical value

●   Test-statistic

Rumour has reached the Trading Standards Officer that the manufacturer ABC is deliberately underfilling his cartons of orange juice. It is decided that a sample should be taken to check this claim. The stated contents on the carton are 100 ml on the average, then the alternative hypothesis is:

Answer (Please select your correct option)

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○ $H_1 : \mu = 100$

○ $H_1 : \mu > 100$

○ $H_1 : \mu < 100$

● $H_1 : \mu \neq 100$

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Rumour has reached the Trading Standards Officer that the manufacturer ABC is deliberately underfilling his cartons of orange juice. It is decided that a sample should be taken to check this claim. The stated contents on the carton are 100 ml on the average, then the null hypothesis is:

Answer (Please select your correct option)

VuAnswers.com

● $H_0 : \mu = 100$

○ $H_0 : \mu > 100$

○ $H_0 : \mu < 100$

○ $H_0 : \mu \neq 100$

Made by: Waqar Siddhu

By definition $f(x_i \mid y_j) = $ _____

Answer (Please select your correct option)

- ● $\dfrac{f(x_i, y_j)}{h(y_j)}$

- ○ $\dfrac{f(x_i, y_j)}{h(x_i)}$

- ○ $f(x_i, y_j)$

- ○ $f(y_j)$

The test statistic used in analysis of variance procedure follow the :

Answer (Please select your correct option)

- ○ χ^2 -distribution.

- ○ T-distribution.

- ○ Z-distribution.

- ● F-distribution.

Which one of the following is the most common example of a situation for which the main parameter of interest is a population proportion?

Answer (Please select your correct option)

○ An observational study

○ A normal experiment

○

● A binomial experiment

An estimator which has the smallest standard error among all unbiased estimators fulfills the property of _____.

Answer (Please select your correct option)

VuAnswers.com

- Unbiasedness

- Efficiency

- Consistency

- Sufficiency

An estimator which has the smallest standard error among all unbiased estimators fulfills the property of _____.

Answer (Please select your correct option)

○ Unbiasedness

○ Efficiency

○ Consistency

○ Sufficiency

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Which of the following can never be taken as the probability of an event?

Answer (Please select your correct option)

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○ 1

○ 0

○ 0.5

● -0.5

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A set is any well-defined collection of

Answer (Please select your correct option)

○ Positive Objects

○ Negative Objects

○ Same Objects

● Distinct Objects

Measure of dispersion is used to calculate the:

Answer (Please select your correct option)

○ Central value

○ Highest value

○ Lowest value

○ Scattered value

If X and Y are independent variables then Var (X-Y) = _____

Answer (Please select your correct option)

Var(X) - Var(Y)

Var(X) + Var(Y)

Var(X+Y)

Var(X) ×Var(Y)

How the standard error is decreased :

Answer (Please select your correct option)

○ By decreasing the sample size

○ By decreasing the mean

○ By increasing the standard deviation

● By increasing the sample size

The total number of samples when sampling is done with replacement is equal to:

Answer (Please select your correct option)

- ● N^n

- ○ C_n^N

- ○ $\dfrac{N-n}{N-1}$

- ○ 1

If you draw all possible samples from some population, calculate the mean for each of the sample and construct the probability distribution of the sample means, what would you have?

Answer (Please select your correct option)

○ A population distribution

○ A sample distribution

● A sampling distribution

○ A parameter distribution

The conditional probability function $f(x \mid 1) = $ _____

Answer (Please select your correct option)

○ $f(1,1)$

○ $f(x,1)$

● $\dfrac{f(x,1)}{h(1)}$

○ $\dfrac{f(x,1)}{h(x)}$

For $\alpha = 0.01$, the critical values of z for two tailed test are equal to:

Answer (Please select your correct option)

● -2.58 and +2.58

○ -2.33 and +2.33

○ -1.645 and +1.645

○ -1.96 and + 1.96

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A deserving player is not selected in the team is an example of:

Answer (Please select your correct option)

- ● Type I error
- ○ Type II error
- ○ Correct decision
- ○ No information regarding this

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"A point estimate plus/minus a few times the standard error of that estimate". This statement represents:

Answer (Please select your correct option)

○ Confidence interval

○ Critical region

○ Acceptance region

○ Critical value

The proportion of males in Pakistan is at least 0.48, the alternative hypothesis H_1 is

Answer (Please select your correct option)

○ $P \leq 0.48$

○ $P = 0.48$

● $P < 0.48$

○ $P \geq 0.48$

If $\bar{X}$ is the mean of the n observations, then which test statistic will be used to calculate the confidence limits of the population variance σ^2?

Answer (Please select your correct option)

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○ Z-statistic

○ T-statistic

○ χ^2 -statistics

not sure

○ F-statistics

To find the confidence interval for the ratio of two variances, we use

Answer (Please select your correct option)

◉ F-Distribution

○ Z-Distribution

○ Chi-square-Distribution

○ t-Distribution

The Chi- Square distribution is continuous distribution ranging from:

Answer (Please select your correct option)

○ $-\infty \leq \chi^2 \leq \infty$

○ $-\infty \leq \chi^2 \leq 1$

○ $-\infty \leq \chi^2 \leq 0$

● $0 \leq \chi^2 \leq \infty$

In Statistics, we have MSE which is abbreviation of:

Answer (Please select your correct option)

- ● Mean square error

- ○ Measured square error

- ○ Medical screening exam

- ○ Major sampling error

In a binomial experiment the total number of trials are:

Answer (Please select your correct option)

○ Fixed in advance

○ Changeable according to situation

○ Unpredictable

○ Not independent

The lottery tickets issued for the purpose of money-making follows a:

Answer (Please select your correct option)

○ Normal distribution

○ Discrete uniform distribution

○ Binomial distribution

○ Hypergeometric distribution

Which of the following value could not represent a coefficient of correlation?

Answer (Please select your correct option)

○ r = 0.99

○ r = 1.09

○ r = -0.73

○ r = -1

In a one way ANOVA test there are 5 observations in each of three treatments. The degrees of freedom for the treatments is:

Answer (Please select your correct option)

VuAnswers.com

- ○ 5

- ○ 3

- ○ 1

- ● 2

Made by: Waqar Siddhu

If P(B|A) = 0.25 and $P(A \cap B) = 0.20$, then P(A) =

Answer (Please select your correct option)

- ○ 0.05
- ● 0.80
- ○ 0.95
- ○ 0.75

If a random variable X denotes the number of heads when three distinct coins are tossed, the X assumed the values:

Answer (Please select your correct option)

○ 0,1,2,3

○ 1,3,3,1

○ 1, 2, 3

○ 3, 2

When f(x) is continuous probability function, then P(X = 2) is:

Answer (Please select your correct option)

○ 1

○ 0.5

● 0

○ 0.25

Atmosphere pressure is the example of:

Answer (Please select your correct option)

○ Constant

○ Qualitative variable

● Quantitative variable

○ None of the above

VuAnswers.com

Made by: Waqar Siddhu

Which of the following scale has true zero point?

Answer (Please select your correct option)

● Ratio Scale

○ Interval scale

○ Nominal scale

○ Ordinal scale

Given the series 1,2,1,1,2,2,2,2,3,4,5,3,2,3,1,4,2,3. Which one of the following is mode of the given seires:

Answer (Please select your correct option)

- 4

- 3
  3

- 2
  3
  2

- 1
  3
  2*

Var(4X + 5) = _____

Answer (Please select your correct option)

○ 16 Var (X)

○ 16 Var (X) + 5

○ 4 Var (X) + 5

○ 12 Var (X)

When f(x) is continuous probability function, then P(X = 1) is:

Answer (Please select your correct option)

- ○ 1
- ○ ∞
- ○ −∞
- ○ 0

The hyper geometric random variable is a(an):

Answer (Please select your correct option)

- Continuous variable

- Discrete variable

- Undefined

- Independent variable

The degrees of freedom for a t-test with sample size 'n' is:

Answer (Please select your correct option)

n-1

n+1

n-2

n+2

Rumour has reached the Trading Standards Officer that the manufacturer ABC is deliberately underfilling his cartons of orange juice. It is decided that a sample should be taken to check this claim. The stated contents on the carton are 100 ml on the average, then the null hypothesis is:

Answer (Please select your correct option)

○ $H_0 : \mu = 100$

○ $H_0 : \mu > 100$

○ $H_0 : \mu < 100$

○ $H_0 : \mu \neq 100$

Assuming that following is a probability distribution, then what is the value of 'a':

X	1	2	3
P(X)	0.1	a	0.1

Answer (Please select your correct option)

VuAnswers.com

- 0.6
- 0.8
- 0.2
- 0.4

Made by: Waqar Siddhu

In normal distribution $\beta_1 = \ldots\ldots$:

Answer (Please select your correct option)

0

1

2

3

A good way to get a small standard error is to use a _____.

Answer (Please select your correct option)

○ Repeated sampling

○ Small sample

○ Large sample

○ Large population

A randomly selected sample of 400 students at university was asked whether or not they will participate in politics. Forty-six percent of the 400 student surveyed answered "yes". Which one of the following statement about number 46% is correct?

Answer (Please select your correct option)

○ It is a sample statistic.

○ It is a population parameter.

○ It is a margin of error.

○ It is a standard error.   **not sure**

If you draw all possible samples from some population, calculate the mean for each of the sample and construct the probability distribution of the sample means, what would you have?

Answer (Please select your correct option)

○ A population distribution

○ A sample distribution

○ A sampling distribution

○ A parameter distribution

The conditional probability function $f(x|1)$ = _____

Answer (Please select your correct option)

○ $f(1,1)$

○ $f(x,1)$

○ $\dfrac{f(x,1)}{h(1)}$

○ $\dfrac{f(x,1)}{h(x)}$

If f (x, y) is bivariate probability density function of continuous random variables X and Y then marginal density function of y i.e. $h(y)$ is:

Answer (Please select your correct option)

○ $\int\limits_{-\infty}^{\infty} f(x,y)\, dx$

○ $\int\limits_{-\infty}^{\infty} f(x,y)\, dy$

○ $\int\limits_{-\infty}^{\infty} \int\limits_{-\infty}^{\infty} f(x,y)\, dx\, dy$

○ $\int\limits_{a}^{b} \int\limits_{c}^{d} f(x,y)\, dy\, dx$

_____ is a range of numbers inferred from the sample that has a certain probability of including the population parameter over the long run.

Answer (Please select your correct option)

○ Hypothesis

○ Lower limit

○ Confidence interval   **not sure**

○ Probability limit

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How many parameter(s) are in t-distribution?

Answer (Please select your correct option)

○ 0

○ 1

○ 2

○ 3

A judge can acquit a guilty person is the example of:

Answer (Please select your correct option)

- ○ Type I error

- ○ Type II error

- ○ Correct decision   **not sure**

- ○ No information regarding this

If the sampling distribution of $\bar{X}$ is normal, we would expect 99% of the sample means to be within the interval:

Answer (Please select your correct option)

○ $\mu_x \pm 2\sigma_x$

○ $\mu_x \pm 1.96\sigma_x$

○ $\mu_x \pm 2.58\sigma_x$

○ $\mu_x \pm \sigma_x$

The proportion of males in Pakistan is at least 0.48, the alternative hypothesis H_1 is

Answer (Please select your correct option)

VuAnswers.com

○ $P \leq 0.48$

○ $P = 0.48$

○ $P < 0.48$ **not sure**

○ $P \geq 0.48$

Made by: Waqar Siddhu

If mean of χ^2 distribution is k then variance will be:

Answer (Please select your correct option)

k^2

2k

1/k

k

Test Statistics χ^2 is equal to:

Answer (Please select your correct option)

○ $\dfrac{n^2 S^2}{\sigma_0^2}$

○ $\dfrac{n S^2}{\sigma_0^2}$

○ $\dfrac{S^2}{2\sigma_0^2}$

○ $\dfrac{n^2 S^2}{2\sigma_0^2}$

F- distribution is ....

Answer (Please select your correct option)

○ Positively skewed

○ Negatively skewed

○ Normal

○ Symmetrical

The Chi- Square distribution is continuous distribution ranging from:

Answer (Please select your correct option)

- $-\infty \leq \chi^2 \leq \infty$

- $-\infty \leq \chi^2 \leq 1$

- $-\infty \leq \chi^2 \leq 0$

- $0 \leq \chi^2 \leq \infty$

In Statistics, we have MSE which is abbreviation of:

Answer (Please select your correct option)

Mean square error

Measured square error

Medical screening exam

Major sampling error

The LSD test is applied when the null hypothesis is:

Answer (Please select your correct option)

Rejected

Accepted

Finalized

Acknowledged

VuAnswers.com

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As the degree of freedom increases, the t-distribution tends to coincide with:

Answer (Please select your correct option)

○ Binomial distribution

○ Uniform distribution

○ Hypergeometric distribution

○ Normal distribution

VuAnswers.com

Made by: Waqar Siddhu

In a binomial experiment the total number of trials are:

Answer (Please select your correct option)

Fixed in advance

Changeable according to situation

Unpredictable

Not independent

What is the probability of drawing a red-queen card from a well shuffled pack of 52 playing cards?

Answer (Please select your correct option)

○ 4/52

⊙ 2/52

○ 13/52

○ 26/52

The probability of drawing a spade card is:

Answer (Please select your correct option)

○ 1/52

○ 4/52

○ 13/52

○ 26/52

Which of the following is true for the binomial distribution b(x; n, p):

Answer (Please select your correct option)

mean > variance

mean < variance

mean = variance

mean= standard deviation

When f(x) is continuous probability function, then P(X = 2) is:

Answer (Please select your correct option)

- 1

- 0.5

- 0

- 0.25

For any two estimators T1 and T2, if VAR(T1) < VAR(T2), then T1 is:

Answer (Please select your correct option)

○ Unbaised

○ Sufficient

○ Efficient

○ Consistent

In construction of a histogram, what would be taken along X-axis?

Answer (Please select your correct option)

○ Mid points

○ Class limits

○ Class interval

○ Class boundaries

If you connect the mid-points of rectangles in a histogram by a series of lines that also touches the x-axis from both ends, what will you get?

Answer (Please select your correct option)

○ Ogive

○ Frequency polygon

○ Frequency curve

○ Historigram

Tabulation is the process of arranging data into:

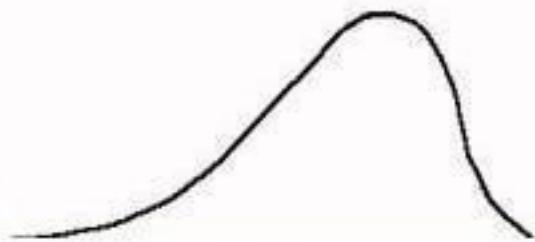**Answer (Please select your correct option)**

○ Different classes

○ Rows

○ Columns

○ Rows and Columns

Which type of the curve is represented by the following shape?

Answer (Please select your correct option)

○ Negatively skewed curve

○ Bell shape curve

○ semi-symmetrical curve

○ Positively skewed curve

If A = {1, 2, 3, 4, 5, 10} and B = {1, 3, 5} then B⊂A means:

Answer (Please select your correct option)

○ A is less than B

○ A is contained in B

○ B is contained in A.

○ B is less than A

What is the mode in the word STATISTICS:

The Mode is defined as that value which occurs most frequently in a set of data i.e. it indicates the most common result.

Answer (Please select your correct option)

- ○ S
- ○ T
- ○ I
- ○ S and T

In a symmetrical distribution, if $Q_1 = 20$, $Q_2 = 30$ *then* Q_3 *is* :

Answer (Please select your correct option)

- ○ 50

- ○ 40

- ○ 30

- ○ 10

Which one of the following is not included in measures of central tendency:

Answer (Please select your correct option)

○ Quartile Deviation

○ Harmonic Mean

○ Geometric Mean

○ Arithmetic Mean

The sum of deviations from mean is:

Answer (Please select your correct option)

- ○ Maximum

- ○ Minimum

- ○ Zero

- ○ Undefined

Mean deviation is always:

Answer (Please select your correct option)

○ Less than Standard Deviation

○ Greater than Standard Deviation

○ Greater or equal to Standard Deviation

○ Less or equal to Standard Deviation

VuAnswers.com

Made by: Waqar Siddhu

The parameter of the chi- square distribution is.......

Answer (Please select your correct option)

v

$v - 1$

$v - 2$

v -p

The value of χ^2 can never be :

Answer (Please select your correct option)

VuAnswers.com

○ Zero

○ Less than 1

○ Greater than 1

○ Negative

Made by: Waqar Siddhu

The probability of an event always lies between:

Answer (Please select your correct option)

○ 0 and $-\infty$

○ -1 and +1

○ $-\infty$ and $+ -\infty$

○ 0 and 1

The number of parameters in a Poisson distribution is (are):

Answer (Please select your correct option)

1

0

2

3

$E(4X + 5) =$_____

Answer (Please select your correct option)

○ $16 E (X)$

○ $16 E (X) + 5$

○ $12 E (X)$

○ $4 E (X) + 5$

In a one-way ANOVA:

Answer (Please select your correct option)

VuAnswers.com

○ The interaction term has (c - 1)(n - 1) degrees of freedom

○ An interaction term is given

○ An interaction effect can be tested

○ There is no interaction term

Made by: Waqar Siddhu

The degrees of freedom for a t-test with sample size 14 is:

Answer (Please select your correct option)

VuAnswers.com

- ○ 14

- ○ 13

- ○ 7

- ○ 0

Made by: Waqar Siddhu

The degrees of freedom for a t-test with sample size 6 is:

Answer (Please select your correct option)

VuAnswers.com

○ 1

○ 3

○ 5

○ 7

Made by: Waqar Siddhu

Which of the following is a characteristics of the normal distribution:

Answer (Please select your correct option)

○ It is a skewed distribution

○ It is bell-shaped

○ It is not asymptotic

○ It is leptokurtic

In normal distribution β_1 = ... :

Answer (Please select your correct option)

0

1

2

3

In normal distribution β_2 = ... :

Answer (Please select your correct option)

○ 1

○ 2

○ 3

○ 0

A good way to get a small standard error is to use a _____.

Answer (Please select your correct option)

○ Repeated sampling

○ Small sample

○ Large sample

○ Large population

Which of the following is a measure of absolute dispersion?

Answer (Please select your correct option)

VuAnswers.com

○ Skewness

○ Mean Deviation

○ Coefficient of variation

○ Kurtosis

Made by: Waqar Siddhu

An automobile is running, during the first 60 Km, at the rate of 10 Km/hr. During the second 60 Km at the rate of 30Km/hr, while during the third 60 Km its speed was 40 Km/hr. What method is more appropriate to calculate the average speed?

Answer (Please select your correct option)

VuAnswers.com

○ Median

○ Arithematic mean

○ Harmonic mean

○ Geometric mean

Made by: Waqar Siddhu

If $S.D(X) = 5$ then $S.D(\dfrac{2X + 5}{2}) =$ _____

Answer (Please select your correct option)

VuAnswers.com

○ 5

○ 10

○ 15

○ (7.5)

For a particular data set the Pearson's coefficient of skewness is greater then zero. What will be the shape of distribution?

Answer (Please select your correct option)

○ Negatively skewed

○ J-shaped

○ Symmetrical

○ Positively skewed

The total number of samples when sampling is done without replacement is equal to:

Answer (Please select your correct option)

VuAnswers.com

○ N^n

○ C_n^N

○ $\dfrac{N-n}{N-1}$

○ 1

Made by: Waqar Siddhu

Which of the following is correct option to find $P(X + Y \leq 1)$?

Answer (Please select your correct option)

○ $f(0, 0) + f(0, 1) + f(1, 2)$

○ $f(2, 0) + f(0, 1) + f(1, 0)$

○ $f(0, 0) + f(1, 1) + f(1, 0)$

○ $f(0, 0) + f(0, 1) + f(1, 0)$

The conditional probability function $f(x|1) = $ _____

Answer (Please select your correct option)

○ $f(1,1)$

○ $f(x,1)$

○ $\dfrac{f(x,1)}{h(1)}$

○ $\dfrac{f(x,1)}{h(x)}$

If f (x, y) is bivariate probability density function of continuous random variables X and Y then marginal density function of y i.e. $h(y)$ is:

Answer (Please select your correct option)

○ $\int_{-\infty}^{\infty} f(x,y)\,dx$

○ $\int_{-\infty}^{\infty} f(x,y)\,dy$

○ $\int_{-\infty}^{\infty} \int_{-\infty}^{\infty} f(x,y)\,dx\,dy$

○ $\int_{a}^{b} \int_{c}^{d} f(x,y)\,dy\,dx$

VuAnswers.com

Made by: Waqar Siddhu

_____ is a range of numbers inferred from the sample that has a certain probability of including the population parameter over the long run.

Answer (Please select your correct option)

○ Hypothesis

○ Lower limit

○ Confidence interval   *not sure*

○ Probability limit

By definition f(y | x) = _____

Answer (Please select your correct option)

VuAnswers.com

○ $f(y)$

○ $f(x,y)$

○ $\dfrac{f(x,y)}{h(x)}$

○ $\dfrac{f(x,y)}{h(y)}$

Made by: Waqar Siddhu

Which of the following is an unbiased estimator of population σ^2 ?

Answer (Please select your correct option)

○ $\dfrac{\sum (x - \bar{x})^2}{n}$

○ $\dfrac{\sum (x - \bar{x})^2}{n-2}$

○ $\dfrac{\sum (x - \bar{x})^2}{n(n-1)}$

○ $\dfrac{\sum (x - \bar{x})^2}{n-1}$

If a significance level of 1% is used rather than 5%, the null hypothesis is:

Answer (Please select your correct option)

○ More likely to be rejected

○ Less likely to be rejected

○ Just as likely to be rejected

○ None of the above

VuAnswers.com

Made by: Waqar Siddhu

For $\alpha = 0.01$, the critical values of z for two tailed test are equal to:

Answer (Please select your correct option)

○ -2.58 and +2.58

○ -2.33 and +2.33

○ -1.645 and +1.645

○ -1.96 and + 1.96

A judge can acquit a guilty person is the example of:

Answer (Please select your correct option)

VuAnswers.com

○ Type I error

○ Type II error

○ Correct decision
idea

○ No information regarding this

Made by: Waqar Siddhu

The proportion of males in Pakistan is at least 0.48, the alternative hypothesis H_1 is

Answer (Please select your correct option)

VuAnswers.com

○ $P \leq 0.48$

○ $P = 0.48$

○ $P < 0.48$ **idea**

○ $P \geq 0.48$

Made by: Waqar Siddhu

If mean of χ^2 distribution is k then variance will be:

Answer (Please select your correct option)

VuAnswers.com

○ k^2

○ 2k

○ 1/k

○ k

Made by: Waqar Siddhu

What is the graphical shape of the chi-square distribution?

Answer (Please select your correct option)

Positively skewed

○

Negatively skewed

○

Uniformly distributed

○

Normally distributed

○

What factor determines the shape of the t-distribution?

Answer (Please select your correct option)

VuAnswers.com

○ Degree of freedom

○ Critical value

○ Frequency of data

○ Probability

Made by: Waqar Siddhu

The covariance of a random variable with itself is:

Answer (Please select your correct option)

○ Zero

○ One

○ Its variance

○ Its correlation

Hypergeometric probability distribution has :

Answer (Please select your correct option)

VuAnswers.com

○ (n, k) parameter

○ (N) parameter

○ (N, n, N-k) parameter

○ (N ,n, k) parameter

Made by: Waqar Siddhu

For any two estimators T1 and T2, if VAR(T1) < VAR(T2), then T1 is:

Answer (Please select your correct option)

○ Consistent

○ Unbaised

○ Sufficient

○ Efficient

Atmosphere pressure is the example of:

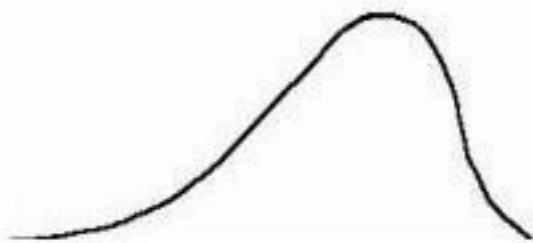**Answer (Please select your correct option)**

○ Constant

○ Qualitative variable

○ Quantitative variable

○ None of the above

VuAnswers.com

Made by: Waqar Siddhu

Which type of the curve is represented by the following shape?

Answer (Please select your correct option)

○ Bell shape curve

○ semi-symmetrical curve

○ Positively skewed curve

○ Negatively skewed curve

Which one of the following is not a type of frequency curve?

Answer (Please select your correct option)

○ The symmetrical frequency curve

○ The extremely skewed frequency curve

○ The U-shaped frequency curve

○ Frequency polygon

For positively skewed distribution

Mean.......Median.......Mode:

Answer (Please select your correct option)

○ $\neq$

○ $=$

○ $<$

○ $>$

What is 'f_m' in the formula of mode:

Answer (Please select your correct option)

VuAnswers.com

○ First Frequency

○ Last Frequency

○ Maximum Frequency

○ Minimum Frequency

Made by: Waqar Siddhu

Which one is the measure of central tendency:

Answer (Please select your correct option)

VuAnswers.com

- Variation of the distribution

- Average of the distribution

- Scatterness of the distribution

- Dispersion of the distribution

Made by: Waqar Siddhu

In a set of 10 values all the values are 5, what will be the P_{50}?

Answer (Please select your correct option)

○ 2

○ 5   i think

○ 10

○ 20

The parameter of the chi- square distribution is.......

Answer (Please select your correct option)

v

$v - 1$

$v - 2$

$v - p$

The value of χ^2 can never be :

Answer (Please select your correct option)

○ Zero

○ Less than 1

○ Greater than 1

○ Negative

Analysis of variance is a procedure that enables us to test the equality of several:

Answer (Please select your correct option)

VuAnswers.com

Variances

ANALYSIS OF VARIANCE (ANOVA)

It is a procedure which enables us to test the hypothesis of equality of several population means

(i.e.

H0 : $\mu 1 = \mu 2 = \mu 3 = \ldots\ldots = \mu k$

against

Means

Proportions

Groups

Made by: Waqar Siddhu

When two coins are tossed the probability of at most one head is:

Answer (Please select your correct option)

1/4

2/4

3/4

4/4

VuAnswers.com

Made by: Waqar Siddhu

The critical region for $H_1 : \mu < \mu_0$ when $\alpha = 0.05$ is:

Answer (Please select your correct option)

VuAnswers.com

○ $z > z_{0.05}$

○ $|z| > z_{0.10}$

○ $z < -z_{0.05}$

○ $|z| > z_{0.05}$

Made by: Waqar Siddhu

A discrete probability function f(x) is always:

Answer (Please select your correct option)

VuAnswers.com

○ Non-negative

○ Negative

○ One

○ Zero

Made by: Waqar Siddhu

When f(x) is continuous probability function, then $P(X = 1)$ is:

Answer (Please select your correct option)

○ 1

○ ∞

○ $-\infty$

○ 0

A random variable can be generated:

Answer (Please select your correct option)

○ Manually

○ Mechanically

Not sure.. :)   concpt.. :)

○ Manually & Mechanically

○ Mathematically   numerical quantity whose value is determined by the outcome of a random experiment is called a random variable.

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Made by: Waqar Siddhu

The curve of the F- distribution depends upon:

Answer (Please select your correct option)

○ Degrees of freedom

○ Standard deviation

○ Mean

○ Variance

VuAnswers.com

Made by: Waqar Siddhu

Assuming that following is a probability distribution, then what is the value of 'a':

X	1	2	3
P(X)	0.1	a	0.1

VuAnswers.com

Answer (Please select your correct option)

○ 0.6

○ 0.8

○ 0.2

○ 0.4

Made by: Waqar Siddhu

The mode value from raw data can be obtained by the help of

Answer (Please select your correct option)

○ Dot plot

○ Stem and leaf plot

○ Bar chart

○ None of these

In normal distribution, the quartile deviation Q.D = ... :

Answer (Please select your correct option)

0.5σ

0.75σ

0.7979σ

0.6745σ

VuAnswers.com

Made by: Waqar Siddhu

A randomly selected sample of 400 students at university was asked whether or not they will participate in politics. Forty-six percent of the 400 student surveyed answered "yes". Which one of the following statement about number 46% is correct?

Answer (Please select your correct option)

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○ It is a sample statistic.

○ It is a population parameter.

○ It is a margin of error.

○ It is a standard error.   not sure

Made by: Waqar Siddhu

A student solved 25 questions from first 50 questions of a book . The probability that he will solve the remaining all questions is:

VuAnswers.com

Answer (Please select your correct option)

○ 0.25

○ 0.5

○ 1

○ 0

Made by: Waqar Siddhu

The average which is defined as the reciprocal of the arithmetic mean of the reciprocals of the values is called:

Answer (Please select your correct option)

○ Geometric Mean

○ Harmonic Mean

○ Mode

○ Median

For the independent events A and B if P (A) = 0.25, P (B) =0.40 then P (A∩B) =……..

Answer (Please select your correct option)

○ 0.65

○ 0.1

○ 0.50

○ 0.15

The total number of samples when sampling is done with replacement is equal to:

Answer (Please select your correct option)

○ N^n

○ C_n^N

○ $\dfrac{N-n}{N-1}$

○ 1

Which of the following is correct option to find $P(X + Y \leq 1)$?

Answer (Please select your correct option)

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○ $f(0, 0) + f(0, 1) + f(1, 2)$

○ $f(2, 0) + f(0, 1) + f(1, 0)$

○ $f(0, 0) + f(1, 1) + f(1, 0)$

○ $f(0, 0) + f(0, 1) + f(1, 0)$

Made by: Waqar Siddhu

The conditional probability function $f(x \mid 1) = $ _____

Answer (Please select your correct option)

○ $f(1,1)$

○ $f(x,1)$

○ $\dfrac{f(x,1)}{h(1)}$

○ $\dfrac{f(x,1)}{h(x)}$

In interval estimation, we always get:

Answer (Please select your correct option)

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- Range of values

- Zero

- Single value

- Two values

Made by: Waqar Siddhu

Which of the following is an unbiased estimator of population σ^2 ?

Answer (Please select your correct option)

○ $\dfrac{\sum (x - \bar{x})^2}{n}$

○ $\dfrac{\sum (x - \bar{x})^2}{n - 2}$

○ $\dfrac{\sum (x - \bar{x})^2}{n(n - 1)}$

○ $\dfrac{\sum (x - \bar{x})^2}{n - 1}$

How many parameter(s) are in t-distribution?

Answer (Please select your correct option)

0

1

2

3

A deserving player is not selected in the team is an example of:

Answer (Please select your correct option)

○ Type I error

○ Type II error

○ Correct decision

○ No information regarding this

After an interval is constructed, then what is the probability of occurrence of the parameter in it?

Answer (Please select your correct option)

○ Zero

○ One

○ Fifty

○ Either one or zero

If $\bar{X}$ is the mean of the n observations, then which test statistic will be used to calculate the confidence limits of the population variance σ^2 ?

Answer (Please select your correct option)

○ Z-statistic

○ T-statistic

○ χ^2-statistics

○ F-statistics

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If mean of χ^2 distribution is k then variance will be:

Answer (Please select your correct option)

- k^2

- 2k

- 1/k

- k

What is the graphical shape of the chi-square distribution?

Answer (Please select your correct option)

Positively skewed

Negatively skewed

Uniformly distributed

Normally distributed

What factor determines the shape of the t-distribution?

Answer (Please select your correct option)

VuAnswers.com

○ Degree of freedom

○ Critical value

○ Frequency of data

○ Probability

Made by: Waqar Siddhu

If X and Y are random variables, then $E(X-Y)$ is equal to:

Answer (Please select your correct option)

○ $E(X) + E(Y)$

○ $E(X) - E(Y)$

○ $X - E(Y)$

○ $E(X) - Y$

In the regression line $Y = a + bX$, the non-random variable is:

Answer (Please select your correct option)

not sure

○ Y

○ X

○ Both X and Y

○ Neither X nor Y

The parameters of the binomial distribution b(x; n, p) are:

Answer (Please select your correct option)

○ x & n

○ x & p

○ n & p

○ x, n & p

Which of the following is true for the binomial distribution b(x; n, p):

Answer (Please select your correct option)

○ mean > variance

○ mean < variance

○ mean = variance

○ mean= standard deviation

Hypergeometric probability distribution has :

Answer (Please select your correct option)

○ (n, k) parameter

○ (N) parameter

○ (N, n, N-k) parameter

○ (N ,n, k) parameter

The variance of the hypergeometric probability distribution is:

Answer (Please select your correct option)

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○ $\sigma^2 = n\dfrac{k}{N}$

○ $\sigma^2 = n\dfrac{k}{N}\dfrac{N-k}{N}\dfrac{N-n}{N-1},$

○ $\sigma^2 = npq$

○ $\sigma^2 = N\dfrac{n}{K}$

Tabulation is the process of arranging data into:

Answer (Please select your correct option)

○ Different classes

○ Rows

○ Columns

○ Rows and Columns

A simple bar chart consists of:

Answer (Please select your correct option)

○ Vertical bars

○ Horizontal bars

○ Vertical or horizontal bars

○ Multiple bars

Which one is the formula to calculate the approximate value of class interval?

Answer (Please select your correct option)

○ Minimum value/Range

○ Maximum value/No. of classes

○ No. of classes/Range

Range/No. of classes

Which one of the following is equal to the 2nd quartile:

Answer (Please select your correct option)

○ P_{33}

○ D_3

○ Median

○ Mode

For the independent events A and B if P (A) = 0.15, P (B) =0.50 then P (A∩B) =........

Answer (Please select your correct option)

○   0.50

○   0.075

○   0.125

○   0.060

Which one of the following measure is not based on all the observations?

Answer (Please select your correct option)

○ Arithmetic Mean

○ Geometric Mean

○ Harmonic Mean

○ Mode