STA301 - Statistics and Probability (Quiz#3) Quiz Start Time: 07:19 AM, 25 January 2023

Question # 1 of 10 (Start time: 07:19:38 AM, 25 January 2023) Total Marks:

As sample size goes up, what tends to happen to 95% confidence intervals?

Select the correct option

- They become more precise
- They become more precise and narrow
- They become more narrow
- They become wider

STA301 - Statistics and Probability (Quiz#3) Quiz Start Time: 07:19 AM, 25 January 2023

Question # 2 of 10 (Start time: 07:20:46 AM, 25 January 2023) Total Marks:

A standard deviation obtained from sampling distribution of sample statistics is known as

Select the correct option

- Universal error
- Standard error
- Minimum error
- Sampling error

Saving...

STA301 - Statistics and Probability (Quiz#3) Quiz Start Time: 07:19 AM, 25 January 2023

Question # 3 of 10 (Start time: 07:20:55 AM, 25 January 2023) Total Marks:

We can apply method of Maximum Likelihood on:

Select the correct option

- Continuous variables only
- Discrete as well as continuous variables
- Discrete variables only
- Qualitative variables only

STA301 - Statistics and Probability (Quiz#3) Quiz Start Time: 07:19 AM, 25 January 2023

Question # 4 of 10 (Start time: 07:22:10 AM, 25 January 2023) Total Marks:

If the two populations are non-normal and both the sample sizes are large, then the sampling distribution of the difference of means will be:

Select the correct option

- F-distribution
- Normal distribution
- t-distribution
- Chi-square distribution

STA301 - Statistics and Probability (Quiz#3) Quiz Start Time: 07:19 AM, 25 January 2023

Question # 5 of 10 (Start time: 07:23:37 AM, 25 January 2023) Total Marks:

The probability distribution of the proportion of successes in all possible samples is called the:

Select the correct option

- Sampling distribution of Population proportions
- Sampling distribution of sample proportions
- Sampling probability distribution
- Sampling distribution

STA301 - Statistics and Probability (Quiz#3) Quiz Start Time: 07:19 AM, 25 January 2023

Question # 6 of 10 (Start time: 07:24:36 AM, 25 January 2023) Total Marks:

The larger the n, the smaller the standard error, and so the narrower the

Select the correct option

- Confidence interval
- None of the above
- Confidence level
- Level of significance

STA301 - Statistics and Probability (Quiz#3) Quiz Start Time: 07:19 AM, 25 January 2023

Question # 7 of 10 (Start time: 07:25:59 AM, 25 January 2023) Total Marks:

An estimator is said to be efficient if it has

Select the correct option

- None of these
- Both (a) & (b)
- Unbiased estimate
- Smallest Variance

STA301 - Statistics and Probability (Quiz#3) Quiz Start Time: 07:19 AM, 25 January 2023

Question # 8 of 10 (Start time: 07:26:18 AM, 25 January 2023) Total Marks:

In testing H0: $\mu = 100$ against H1: $\mu \leq 100$ at the 10% level of significance,H0 is rejected if:

Select the correct option

- The p-value is greater than 0.10
- The p-value is less than 0.10
- 100 is contained in the 90% confidence interval
- The value of the test statistic is in the acceptance region

STA301 - Statistics and Probability (Quiz#3) Quiz Start Time: 07:19 AM, 25 January 2023

Question # 9 of 10 (Start time: 07:27:02 AM, 25 January 2023) Total Marks:

The confidence intervals become wide and less precise by

Select the correct option

- None of these
- increasing the sample size
- decreasing the sample size
- decreasing the level of significance

STA301 - Statistics and Probability (Quiz#3) Quiz Start Time: 07:19 AM, 25 January 2023

Question # 10 of 10 (Start time: 07:28:10 AM, 25 January 2023) Total Marks:

In the method of moments, how many equations are required for finding two unknown population parameters?

Select the correct option

- 3
- 4
- 1
- 2

Click to Save Answer & Move to Next Question

STA301 - Statistics and Probability (Quiz#3) Quiz Start Time: 07:50 AM, 25 January 2023

Question # 1 of 10 (Start time: 07:50:41 AM, 25 January 2023) Total Marks:

Accept H0/H0 is false, is the _____.

Select the correct option

- Type I error
- Correct decision
- Type II error
- None of the above

STA301 - Statistics and Probability (Quiz#3) Quiz Start Time: 07:50 AM, 25 January 2023

Question # 2 of 10 (Start time: 07:51:21 AM, 25 January 2023) Total Marks:

P	0	1	2	3
f(p)	1/20	9/20	9/20	1/20

The mean of the sampling proportion will be:

Select the correct option

- 10/20
- 15/20
- 25/20
- 30/20

STA301 - Statistics and Probability (Quiz#3) Quiz Start Time: 07:50 AM, 25 January 2023

Question # 3 of 10 (Start time: 07:52:59 AM, 25 January 2023) Total Marks:

The precision of an estimator can be increased by decreasing the:

Select the correct option

- Number of estimators
- Level of significance
- Size of sample
- Number of parameters

STA301 - Statistics and Probability (Quiz#3) Quiz Start Time: 07:50 AM, 25 January 2023

Question # 4 of 10 (Start time: 07:54:18 AM, 25 January 2023) Total Marks:

The sampling distribution of the mean becomes approximately normally distributed only when the following conditions is met?

Select the correct option

- The population is normally distributed.
- The sample size is large.
- The standard deviation of the population is large.
- A single random sample is drawn from the population.

STA301 - Statistics and Probability (Quiz#3) Quiz Start Time: 07:50 AM, 25 January 2023

Question # 5 of 10 (Start time: 07:54:53 AM, 25 January 2023) Total Marks:

As a rule of thumb, when n>=30, then we can assume that.....is normally distributed:

Select the correct option

- Sampling distribution of sample mean
- Sampling distribution
- Probability distribution
- Binomial distribution

STA301 - Statistics and Probability (Quiz#3) Quiz Start Time: 07:50 AM, 25 January 2023

Question # 6 of 10 (Start time: 07:56:12 AM, 25 January 2023) Total Marks:

The standard error of the sampling distribution of the sample mean when sampling is done with replacement is equal to:

Select the correct option

- $\delta/\sqrt{n}$
- δ
- $s / (n - 1)$
- s / n

STA301 - Statistics and Probability (Quiz#3) Quiz Start Time: 07:50 AM, 25 January 2023

Question # 7 of 10 (Start time: 07:57:11 AM, 25 January 2023) Total Marks:

The confidence intervals become wide and less precise by

Select the correct option

- None of these
- decreasing the level of significance
- increasing the sample size
- decreasing the sample size

STA301 - Statistics and Probability (Quiz#3) Quiz Start Time: 07:50 AM, 25 January 2023

Question # 8 of 10 (Start time: 07:58:15 AM, 25 January 2023) Total Marks:

Which one of the statement is true?

Select the correct option

- E (s2) = 62/n
- E (S2) = s2

STA301 - Statistics and Probability (Quiz#3) Quiz Start Time: 07:50 AM, 25 January 2023

Question # 9 of 10 (Start time: 07:58:37 AM, 25 January 2023) Total Marks:

____ is used when we are dealing with proportions to find the probabilities:

Select the correct option

- F distribution
- Both Z & t distribution
- Normal distribution
- t- distribution

Click to Save Answer & Move to Next Question

STA301 - Statistics and Probability (Quiz#3) Quiz Start Time: 07:50 AM, 25 January 2023

Question # 10 of 10 (Start time: 08:00:20 AM, 25 January 2023) Total Marks:

If we draw a sample of size 'n' from a population then sample is called "large sample" if:

Select the correct option

- n>50
- n>30
- n>40
- n>25

Click to Save Answer & Move to Next Question