Construction and Industry

Certified-Six-Sigma-Black-Belt
Certified Six Sigma Black Belt Certification Exam

Latest Version: 6.0

Question: 1

If there are 32 observations in an experiment, it is typical to run autocorrelations from lag 1 to

A. lag 4.
B. lag 8.
C. lag 16.
D. lag 32.

Answer: B

Explanation:
If there are 32 observations in an experiment, it is typical to run autocorrelations from lag 1 to lag 8. The basic calculation for the number of autocorrelations in an experiment is lag 1 to lag x/4, in which x is the number of observations. Because there are 32 observations in this experiment, autocorrelations should run from lag 1 to lag 8. The lag is the difference between correlated observations. In lag 1, for instance, observation 1 is correlated with observation 2, observation 2 is correlated with observation 3, observation 3 is correlated with observation 4, and so on. In lag 8, observation 1 would be correlated with observation 9, observation 2 with observation 10, observation 3 with observation 11, and so on. An experiment with 32 observations would include all of the intervening correlations between lag 1 and lag 8 (i.e., lags 2 through 7).

Question: 2

Which of the following is a disadvantage of using enumerative statistics?

A. It is difficult to determine whether the samples are representative.
B. These statistics do not produce an assumed distribution.
C. They cannot be applied to process baseline estimation.
D. Values are drawn from a static population.

Answer: D

Explanation:
One disadvantage of using enumerative statistics is that values are drawn from a static population. If a dynamic process is to be measured, as is often the case in Six Sigma, it is necessary to use analytical statistics. The other answer choices allude to advantages of enumerative statistics. For instance, one advantage of enumerative statistics is that they make it easy to determine whether samples are representative. A representative sample is one extracted from the population without any bias. Enumerative statistics provide an assumed distribution as well as a confidence level and a set of confidence intervals. Finally, enumerative statistics may be applied to process baseline estimation, namely for the purpose of assessing random samples.

Question: 3

Which distribution is appropriate for a continuous set of data with a fixed lower boundary but no upper boundary?

A. Johnson
B. Exponential
C. Normal
D. Lognormal

Answer: D

Explanation:
A lognormal distribution is appropriate for a continuous set of data with a fixed lower boundary but no upper boundary. In most cases, the lower boundary on a lognormal distribution is zero. These distributions can be tested with a goodness-of-fit test. A Johnson distribution is more appropriate for continuous data that, for whatever reason, is inappropriate for a normal or exponential distribution. An exponential distribution is appropriate for any set of continuous data, though these distributions are most often used for frequency data. A normal distribution is appropriate for a set of continuous data with neither an upper nor a lower boundary. The normal distribution follows the pattern of the classic bell curve.

Question: 4

In metrology, what is the degree to which a measurement can be compared to a known standard with confidence called?

A. Traceability
B. Measurement uncertainty
C. Calibration
D. Engineering tolerance

Answer: A

Explanation:
In metrology, the degree to which a measurement can be compared to a known standard with confidence is called traceability. Experts on measurement are aware that every gauge is to some extent inaccurate (i.e., it contains measurement uncertainty), but it is important that these inaccuracies themselves be measurable. Six Sigma projects require a number of different measurements taken at different times and in different conditions, and it is essential that these measurements have essentially the same level of traceability.

Question: 5

Which of the following autocorrelation functions would indicate the strongest correlation?

A. 0.1
B. -0.8
C. 0.9
D. -0.2

Answer: C

Explanation:
An autocorrelation function of 0.9 would indicate the strongest correlation. The range of autocorrelation functions and partial autocorrelation functions extends from —1 to 1. The strength of the correlation is indicated by the distance from 0 (i.e., the absolute value) regardless of whether the value is on the positive or negative side. Therefore, an autocorrelation function of 0.9 would indicate a stronger correlation than would functions of 0.1, —0.8, and —0.2.

Thank You for Trying Our Product

For More Information – Visit link below:

https://www.examsboost.com/

15 USD Discount Coupon Code:

G74JA8UF

FEATURES

- ✓ 90 Days Free Updates
- ✓ Money Back Pass Guarantee
- ✓ Instant Download or Email Attachment
- ✓ 24/7 Live Chat Support
- ✓ PDF file could be used at any Platform
- ✓ 50,000 Happy Customer