Question 1

The validity of the decision made with Hypothesis Testing is dependent upon all of the following except _____.

Options:

A- Beta risk

B- Range of data

C- Alpha risk

D- Sample size

Answer:

B

Question 2

To be an effective Lean Six Sigma practitioner one must understand the difference between _____.

Options:

A- ANOVA and the Analysis of Variance

B- Nonparametric tests and tests of Non-normal Data

C- Practical and Statistical significance

D- F-test and test of variances of 2 samples

Answer:

C

Question 3

Question Type: MultipleChoice

Statistical Difference is the magnitude of difference or change required to distinguish between a true difference, brought about by change or improvement, and one that could have occurred by chance.

Options:

A- True

B- False

Answer:

A

Question 4

Question Type: MultipleChoice

When conducting a Hypothesis Test using Continuous Data the proper sample size is influenced only by the extent to which we need to assess a Difference to be detected but not the inherent variation in the process.

Options:

A- True

B- False

Answer:

B

Question 5

Question Type: MultipleChoice

If the results from a Hypothesis Test are located in the "Region of Doubt" area, what can be concluded?

Options:

A- Rejection of the Alpha

B- We fail to reject the Null Hypothesis

C- The test was conducted improperly

D- We reject the Null Hypothesis

Answer:

D

Question 6

Following process modifications, the Null Hypothesis states that no improvement to the process has occurred. If we discover the Null Hypothesis Test was rejected when it was false that would be a(n) _____.

Options:

A- Type I Error

B- Type II Error

C- Type III Error

D- Alpha Error

Answer:

B

Question 7

For the data shown here which statement(s) are true? (Note: There are 2 correct answers).

Grade A	Grade B	Grade C
0.917	1.1	0.63
0.68	0.173	4.17
1.74	0.24	0.6
0.3	0.67	0.84
0.33	6.94	0.22
4.13		

Options:

A- With 95% confidence, we cannot conclude if the samples are from three Normal Distributions

B- With greater than 95% confidence, we conclude the samples are from Non-normal Distributions

C- If we wanted to compare the Central Tendencies of these three samples we would use the one way ANOVA test

D- If we wanted to compare the Central Tendencies of these three samples we could use Mood's Median test

E- If we wanted to compare the Central Tendencies of all three samples we could use the Mann-Whitney test

Answer:

B, D