**Chapter 3 Probability distributions – MCQ Student**

1. Probability is usually measured on the scale between zero and 1
   1. True
   2. False

The correct answer is a.

Support comment: It makes no sense to have the values beyond zero or one, for simple reason that 1 represents 100% and 0 represents 0%.

1. The set of all possible outcomes in an experiment is defined as the total population
   1. True
   2. False

The correct answer is a.

Support comment:

1. Sample space is:
   1. The set of all possible outcomes
   2. The space where samples are collected
   3. A sample that is spaced out

The correct answer is a.

Support comment:

1. Two events are mutually exclusive if
   1. They are exclusively connected
   2. They cannot occur together
   3. They exclusively include mutuality

The correct answer is b.

Support comment:

1. Standard normal distribution enables, among other things, a comparison between the two similar distributions that might be expressed in different units
   1. True
   2. False

The correct answer is a.

Support comment: Standard deviation, assuming the distributions are of the same type, allows direct comparison

1. One way to determine if a variable is distributed as normal is to do
   1. A normal randomness calculation
   2. A normal probability plot
   3. A normal histogram plot

The correct answer is b.

Support comment: A normal probability plot is the most common and correct way to establish if the variable is distributed in accordance with the normal distribution

1. Poisson distribution is used when:
   1. We have infinite number of cases n, but there is very, very small (infinitesimally small) probability of success p
   2. When we have very few cases and there is significant probability of success p
   3. When the data fails the normality test

The correct answer is a.

Support comment: