**CA2.4 Concepts Assignment Segment – Continuous Random Variables and Probability Distributions**

Use ONLY words (no formulas, no equations, and no symbols) to answer the following questions:

1. Define in your own words what a continuous variable is.

Think of 3-5 things that are discrete variables

1. What is the probability density function?

1. What is a cumulative distribution function?

For the following types of distributions explain in words (no formulas, no equations, and no symbols) a) what they model? and What the given elements are for each (i.e. event, sample, conditional/independent)? Then provide one example from your field\* of how they could be applied (you may use sources but must have more than one, you may not quote them, and you must cite them):

1. Normal
2. Exponential
3. Gamma
4. Weibull
5. Lognormal
6. Beta