Individual Assignment for computer simulation and modeling, course code: SEng5112

Instruction:

1. **Never two different students can have the same copy of answers to each question**

2. **The answers should be submitted in hand written format**

3. **You have to write your answers as detail as possible**

4. **Hard dead line for the due date is one week before final exam)**

Answer the following questions based on the instruction of each question

1. Discuss the difference and similarities between discrete and continuous random variables.

2. Explain each of the following distribution types

   a) Uniform

   b) Exponential

   c) Normal

   d) Weibull

   e) Lognormal

3. Why is probability theory of interest to performance modeling of information systems?

4. Discuss the concept of Conservation equation

5. Discuss about Markovian Models