Question One (10-Points)
Write True if the statement is true or False if not:
   a. Inferential statistics include describing the data:
      True False
   b. Any process generates data as its outcome is an experiment:
      False True
   c. Data comes from a telephone survey is a secondary data:
      False
   d. The average computed based on a sample of size 1000 is a parameter:
      False

Question Two (5-Points)
Define using your words the following:
   a. Statistic: Any numerical measurement based on the sample
      2.5
   b. Sample: A subset of the population under study
      2.5

Question Three (5-Points)
Suppose that in a certain department there are professors, associate professors, and assistant professors, and we want to take a sample of size n to study their salaries, what is the sampling technique should be used? And explain the procedure to select your sample.

- Stratified Sample
- Divide the pop into three strata
- From each stratum select a simple random sample say
  n₁ from professors
  n₂ = associate professors
  n₃ = assistant
- The required sample size
  n = n₁ + n₂ + n₃