Name: Section:

ID: Serial:

Question One (10-Points)

Write **True** if the statement is true or **False** if not:

a. Inferential statistics include describing the data:-- False   (2-5) each

b. Any process generates data as its outcome is an experiment:---True

c. Data comes from a telephone surveys 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 wards the following:

a. Statistic :   Any numerical measurments computed based on a sample from the population.   (2.5)

b. Quantitive data: Data whose values are numerical   (2.5)

Question Three (5-Points)

Suppose that in a certain department there are 10 professors, 15 associate professors, and 25 assistant professors, and we want to take a sample of size 10 to study their salaries, what is the sampling technique should be used? And explain the procedure to select your sample.

_ A Stratified random Sampling should be used.

1- Divide the population into subgroubs (stratas)   (5)

   stratum one : professors

   stratum two : Associate professors

   stratum three : Assistant professors

2. Select a simple random sample from each stratum, Say n_1, n_2 and n_3 respectively.

3. The stratified random sample of size $10 = n_1 + n_2 + n_3 = n$.