

** Solutions **

King Fahd University of Petroleum & Minerals
Department of Mathematical Science
STAT-211-Term043-I

Quiz #1
ID:

Section:
Serial:

Name:

Question One (10-Points)

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

- a. Inferential statistics include describing the data: *False*
- 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.*

(10)

Question Two :(5-Points)

Define using your words the following:

- a. Statistic: *Any numerical measurement based on the sample*
- b. Sample: *A subset of the population under study.*

(2.5)

(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 strats*
- *From each stratum select a simple random sample say*
 - n_1 from professors
 - n_2 = associate professors
 - n_3 = assistant
- *The required sample is $n = n_1 + n_2 + n_3$.*

(5)