

* SOLUTIONS *

King Fahd University of Petroleum & Minerals
Department of Mathematical Science
STAT-211-Term042-II

Quiz #1
ID:

Section:
Serial:

Name:

Question One (10-Points)

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

- Descriptive statistics describes data using graphs and numerical measurements: True (2.5)
- Any process generates data as its outcome is called an experimental design: False (2.5)
- Data comes from a written surveys is a secondary data: False (2.5)
- The percentage computed based on a sample of size 1000 is a statistic: True (2.5)

Question Two :(5-Points)

Define using your words the following:

- Parameter : Any numerical measurement computed based on the entire population (2.5)
- Qualitative data: Data whose measurement scale is categorical (2.5)

Question Three (5-Points)

Suppose that you want to ask the students about the quality of foods at the university Cafeteria, if the number of all students is 8000, and you have a frame of all of them, and it is decided to take a systematic random sample of size 100 students, explain the method of selecting this sample from the students.

- Determine n , $n = 100$, where $N = 8000$ (5)
- Find k , $k = \frac{N}{n} = \frac{8000}{100} = 80$
- Select any number between 1 & 80 randomly
- Suppose the random number is 15, then the sample is:
15, 95, 175, 255, ... etc.