Quiz #1A Stat211: Business Statistics I Term 071 KFUPM Dept of Math & Statistics
Instructor: Dr. Mohammad H. Omar Section: 1 (8-8.50am) or 2 (9-9.50am) ID#:__________
Serial #:_________ Name:__________________ KEY

Directions: This quiz is designed for 20 minutes. Please answer all questions.

Write True or False against each of the following statements.
1. Descriptive statistical tools include graphs, charts, and numerical measures. (__________ T)
2. When a company scans the bar codes on its products in an effort to count the number of products that remain in inventory, the company is collecting data through survey. (_________ F)
3. When students are asked to list their age and the percentage of their college expenses that they pay for themselves, the type of data being collected is quantitative. (_________ T)
4. The data level that will provide the greatest flexibility for analyzing the data is ordinal data. (_________ F)

Circle the correct answer from the following:
5. If a systematic random sample is to be selected of size 100 from a population with 5,000 items, the first item selected from the ordered population will be:
   a. item 50
   b. randomly selected between 1 and 50 (√)
   c. randomly selected between 1 and 100
   d. randomly selected value between 1 and 5,000

6. The human resources department at a major high tech company recently conducted an employee satisfaction survey of 100 of its 3,000 employees. Data were collected on such variables as age, gender, marital status, current salary, level of overall satisfaction on a scale from 1 to 5, number of years with the company, and job title. Which of the following best describes the overall data set that was generated from the study?
   a. Cross-sectional data (√)
   b. Time series data
   c. Nominal data
   d. Quantitative data

Find the correct answer for the following:
7. First year Finance students at KFUPM are incurring the following weekly living expenses:
   150  200  251  172  138  90  100  105  110  120
   141  145  150  201  150  175  185  215  180  185
   121  130  95  115  201  150  180  165  153  138
You wish to obtain a Simple Random Sample of 3 students from this population of first year Finance majors. So, you listed the students’ living expenses from 1 to 30 where the first row (from the left) of data above is the first ten and so on so forth. Starting from column 9 row 2 of the random number table, provide
   a. the list of unique random numbers chosen
   b. the list of weekly expense for these randomly sampled finance students

   04  27  07
   172  180  100
Write True or False against each of the following statements.

1. In statistical terms, a population is defined as all the people that live in a particular region of the country. (_________ F)

2. Cluster sampling and stratified random sampling are essentially the same type of statistical sampling technique. (_________ F)

3. At the end of the school term, students are asked to rate the instructor and course by indicating on a scale of 1-5 how well they liked the course. The data generated from this question are examples of interval data. (_________ T)

4. The data level that will provide the least flexibility for analyzing the data is ordinal data. (________ F)

Circle the correct answer from the following:

5. One difference between interval level data and ratio level data is:
   a. ratio level data are in numerical order.
   b. ratio level data have a true zero. (√)
   c. interval level data have an absolute zero.
   d. interval level data have unique categories.
   e. interval level data have equal intervals between points

8. The human resources department at a major high tech company recently conducted an employee satisfaction survey of 100 of its 3,000 employees. Data were collected on such variables as age, gender, marital status, current salary, level of overall satisfaction on a scale from 1 to 5, number of years with the company, and job title. Which of the following best describes the overall data set that was generated from the study?
   a. Cross-sectional data (√)
   b. Time series data
   c. Nominal data
   d. Quantitative data
   e. Quantitative data

Find the correct answer for the following:

6. First year Finance students at KFUPM are incurring the following weekly living expenses:

   150 200 251 172 138 90 100 105 110 120
   141 145 150 201 150 175 185 215 180 185
   121 130 95 115 201 150 180 165 153 138

   You wish to obtain a Simple Random Sample of 3 students from this population of first year Finance majors. So, you listed the students’ living expenses from 1 to 30 where the first row (from the left) of data above is the first ten and so on so forth. Starting from column 9 row 3 of the random number table, provide

   a. the list of unique random numbers chosen
   b. the list of weekly expense for these randomly sampled finance students

   27 07 17
   180 100 185