
KING FAHD UNIVERSITY OF PETROLEUM & MINERALS
DEPARTMENT OF MATHEMATICS & STATISTICS
DHAHRAN, SAUDI ARABIA

STAT 211: Statistics for Business I
Semester 171, Quiz 1 (*Code I*), Tuesday October 24, 2017

Name: _____

ID #: _____

Q.No.1: - (2×8 = 16 points) Please mark the correct answer to each of the questions by completely darkening the oval of your choice with a dark pen or pencil. Multiple choice problems are provided in a separate book.

Multiple Choice: **A** **B** **C** **D** **E**(1.1) (1.2) (1.3) (1.4) **Multiple Choice:** **A** **B** **C** **D** **E**(1.5) (1.6) (1.7) (1.8)

Q.No.2: - (4 points) The probability that house sales will increase in the next 6 months is estimated to be 0.25. The probability that the interest rates on the housing loan will go up in the same period is estimated to be 0.74. The probability that house sales or interest rates will go up during the next 6 months is estimated to be 0.89. Find the probability that house sales will increase but interest rates will not during the next 6 months.

Q.No.3: - (3+3 = 6 points) A municipal bond service has two rating categories (A and B). Suppose that in the past year, of the municipal bonds issued throughout the United States, 40% were rated A and 60% were rated B. Of the municipal bonds rated A, 40% were issued by cities. Of the municipal bonds rated B, 25% were issued by cities.

a) What proportion of municipal bonds are issued by cities?

b) If a new municipal bond is to be issued by a city, what is the probability that it will receive A rating?

Best of Luck

(1.1) A wall street journal poll asked 2150 adults in the KSA a series of questions to find out their view on the KSA economy. The possible response to the question “In which year do you think the last recession in the KSA started” result in

- A) a nominal scale variable
- B) an ordinal scale variable
- C) an interval scale variable
- D) a ratio scale variable

(1.2) A wall street journal poll asked 2150 adults in the KSA a series of questions to find out their view on the KSA economy. The possible response to the question “What do you think is the current number of people unemployed in the country” are values from

- A) discrete numerical variable
- B) continuous numerical variable
- C) categorical variable
- D) table of random numbers

(1.3) Which of the following is most likely a parameter and **not** a statistic?

- A) The average score of the first five students completing an assignment
- B) The proportion of female drivers in a country
- C) The average height of people randomly selected from a database
- D) The proportion of trucks stopped yesterday for bad brakes

(1.4) Which of the following is **not** a measure of central tendency?

- A) Arithmetic Mean
- B) Median
- C) Q_3
- D) Geometric Mean
- E) Mode

(1.5) In right-skewed distributions, which of the following is the correct statement?

- A) The distance from Q_1 to Q_2 is greater than the distance from Q_2 to Q_3 .
- B) The distance from Q_1 to Q_2 is less than the distance from Q_2 to Q_3 .
- C) The arithmetic mean is less than the median.
- D) The mode is greater than the arithmetic mean.

(1.6) Which of the following is not sensitive to outliers/extreme values?

- A) The range
- B) The standard deviation
- C) The interquartile range
- D) The coefficient of variation

(1.7) The median of the values 3.4, 4.7, 1.9, 7.6 and 6.5 is equal to:

- A) 4.7
- B) 1.9
- C) 7.6
- D) 3.0

(1.8) If the two events A and B are mutually exclusive and collectively exhaustive, what is the probability that event A occurs?

- A) 0
- B) 0.5
- C) 1
- D) Cannot be determined from the information given.