Quiz

1- Which of the following is not a part of the five number summary?

    A. Q_1
    B. The median
    C. The smallest and the largest data values
    D. The mean

2- If a score on test(A) is 4.5 with $\bar{X} = 5.2$ and s=1.5 and a score on test (B) is 13.6 with $\bar{X} = 16.1$ and s=3.7, which score indicates the higher relative position?

    A. The score on test B is the higher relative position
    B. The score on test A is the higher relative position
    C. Cannot be determined
    D. Both scores have the same relative position

3- Calculate IQR for the following data:

        14, 18, 27, 26, 19, 13, 5, 25

    (Where, Q_1=13.5 and Q_2=18.5)

    A. 6
    B. 19.5
    C. 12
    D. 5

4- A ………… relationship exists if both variables increase or decrease at the same time.

    A. negative
    B. positive
    C. perfect
    D. curvilinear

5- A correlation coefficient of 0.185 means that the relationship is
………….
   A. weak positive
   B. weak negative
   C. strong positive
   D. strong negative

6- Calculate Pearson correlation coefficient for the following data:

x	y
-2	4
5	2
1	-3

Given that: $\sum x^2 = 30, \quad \sum y^2 = 29.$

   A. $- 0.003$
   B. 0.671
   C. $- 0.197$
   D. $- 0.254$

7- The regression line is called the …………
   A. Scatter plot
   B. slope line
   C. intercept line
   D. line of best fit

8- A researcher wished to compare the automobile color preference of
men and women. An experiment was performed recording the
preferences of 9 men and 9 women. If the sum of squares of the
ranking differences is equal to 11, compute the Spearman Rank
correlation coefficient.
   A. 0.953
   B. 0.908
   C. 0.454
   D. 0.825

9- To see if the English level and the Statistics score are related, you can use:

   A. Spearman Correlation Coefficient.
   B. Regression Line.
   C. Pearson Correlation Coefficient.
   D. Sign Test

10- If a die is rolled one time, what is the probability of getting a number greater than 3 and an odd number?

   A.1
   B.0.833
   C.0.167
   D.0.25

11- By how many ways can we select 4 students and 3 teachers from 6 students and 7 teachers?

   A.525
   B.0.306
   C.75600
   D.50

12- In a hospital the staffs are classified as follows:

	Male	Female
Doctor	10	15
Nurse	12	13

If a person is selected at random, what is the probability that the person is a male given that the person is a doctor?

   A. 0.22
   B. 0.74
   C. 0.2
   D. 0.4

13- An insurance company classifies drivers as low-risk, medium-risk, and high-risk. Of those insured, 70% are low-risk, 20% are medium-risk, and 10% are high-risk. After a study, the company finds that during one year period, 2% of the low-risk drivers had an accident, 6% of the medium-risk drivers had an accident, and 9% of the high-risk drivers had an accident. If a driver is selected at random, find the probability that the driver will have had an accident during the year.

    A. 0.035
    B. 0.17
    C. 0.0001
    D. 0.014

14- If a die is rolled 4 times, find the probability of getting at least one even number?

    A. 0.938
    B. 0.063
    C. 0.5
    D. 0.996

15- How many different ID cards can be made if there are 4 digits followed by 3 letters and no digit or letter can be used more than once?

    A. 109
    B. 175760000
    C. 78624000
    D. 118

Answer key

1- D
2- B
3- C
4- B
5- A
6- C
7- D
8- B
9- A
10- C
11- A
12- D
13- A
14- A
15- C