INDIAN SCHOOL AL WADI AL KABIR

Class: XI	Department: Commerce
	Topic: Correlation

1. Correlation measures ---------, not ----------. (causation /covariation)
   A: covariation, causation
2. When the price of apples falls, its demand increases. This is an example of -----(positive/negative) correlation.
      A: Negative
3. ------------- gives a visual presentation of the relationship and is not confined to

   linear relations.

   A: scatter diagram

4. A numerical measure of -------- relationship between two variables is given by

   Karl Pearson's coefficient of correlation.

      A: Linear

5. The unit of correlation coefficient between height in feet and weight in kgs is

   (a)Kg/feet

   (b)Percentage

   (c)Non-existent

   (d)None

     A: C

6. The range of simple correlation coefficient is
   (a) 0 to infinity
   (b) Minus one to plus one
   (c) Minus infinity to infinity
   (d) None of these
   A: B

7. A high value of 'r' indicates strong linear relationship. True/False.
   A: True.

8. If r_{XY} is positive the relation between X and Y is of the type
    (a) When Y increases X increases
    (b) When Y decreases X increases
    (c) When Y increases X does not change
    (d) When Y increases X decreases
       A: A

9. If $r_{XY} = 0$, the variable X and Y are
       (a) linearly related
       (b) not linearly related
       (c) independent
       (d) perfectly correlated
       A: B

10. Karl Pearson's coefficient of correlation is also known as ------
       (a) product moment correlation coefficient
       (b) simple correlation coefficient
       (c) rank correlation coefficient
       (d) both (a) and (b)
          A: D

11. Calculate Karl Pearson's coefficient of correlation:
    X: 20   18   16   15   14   12   12   10   8   5
    Y: 12   16   10   14   12   10   9   8   7   2
    (Ans: 0.87)

12. Compute Karl Pearson's coefficient of correlation and interpret the result:
    Marks in Mathematics: 15   18   21   24   27
    Marks in Economics :   25   25   27   31   32
    (Ans: 0.95)

13. Calculate coefficient of correlation of the following data by the Product moment
    Method:
    X: 8   6   4   3   4
    Y: 9   7   4   4   6
    (Ans: 0.95)

14. Calculate the coefficient of correlation by step deviation method:
    Income (Rs Lac) : 23 27   28   29   30   31   33   35   36   39
    Expenditure   : 18 22   23   24   25   26   28   29   30   32
    (Ans: 0.99)