Question # 1 of 10 (Start time: 11:55:28 AM, 21 July 2023) **Total Marks: 1**

In a simple linear regression analysis, the correlation coefficient (r) and the slope (b1) have the same sign.

Select the correct option

- ○ Most of the times
- ○ Sometimes
- ○ Never
- ● Always

Question # 2 of 10 (Start time: 11:57:00 AM, 21 July 2023) **Total Marks:** 1

The method of least squares finds the best fit line that _____ the error between observed & estimated points on the line

Select the correct option

- ○ Maximizes
- ○ All the given choices are correct.
- ○ Reduces to zero
- ● Minimizes

Question # 3 of 10 (Start time: 11:59:53 AM, 21 July 2023) **Total Marks:** 1

In regression analysis, if X is to be estimated on the basis of Y, then the equation is called the regression equation of

Select the correct option

- ○ Y on Y
- ○ Y on X
- ○ X on X
- ● X on Y

Question # 4 of 10 (Start time: 12:01:43 PM, 21 July 2023) **Total Marks:** 1

An arrangement of all or some of a set of objects in a definite order is called _____.

Select the correct option

- ○ Forecast
- ● Permutation
- ○ Factorial
- ○ Combination

Question # 5 of 10 (Start time: 12:02:11 PM, 21 July 2023) **Total Marks: 1**

The relationship between height and educational qualification

Select the correct option

- ○ The height is independent and education is dependent variable
- ● There is direct relationship between the two
- ○ The height is dependent and education is independent variable
- ○ There is inverse relationship between the two

Question # 6 of 10 (Start time: 12:03:43 PM, 21 July 2023) **Total Marks: 1**

Which of the following correlation coefficients represents the weakest correlation between two variables?

Select the correct option

- ○ -1.00
- ○ 0.15
- ○ 0.02
- ● -0.15

Question # 7 of 10 (Start time: 12:05:24 PM, 21 July 2023) **Total Marks: 1**

The value of dependant variable decreases with increase in the value the independent variable in

Select the correct option

- ○ Positive linear relationship
- ○ Week relationship
- ● Negative linear relationship

For Y = a - b X we say that relationship between Y and X is

Select the correct option

- ○ indirect & linear
- ● direct & linear
- ○ indirect & curvilinear
- ○ direct & curvilinear

Question # 9 of 10 (Start time: 12:07:48 PM, 21 July 2023) **Total Marks:** 1

The sum of the deviations about the mean are always:

Select the correct option

- ○ positive
- ● zero
- ○ the standard deviation total

Question # 10 of 10 (Start time: 12:08:53 PM, 21 July 2023) **Total Marks: 1**

In the calculation of range from group data which of the following play important role?

Select the correct option

- ○ cumulative frequency
- ○ only largest value
- ● both smallest & largest value
- ○ frequency

Question # 1 of 10 (Start time: 12:39:11 PM, 21 July 2023) **Total Marks: 1**

The moving averages can be used for ----------.

Select the correct option

- ○ mode
- ● forecasting purposes
- ○ Middle value.
- ○ Median

Question # 2 of 10 (Start time: 12:39:53 PM, 21 July 2023) **Total Marks: 1**

The minimum value of the correlation coefficient r can be

Select the correct option

- (●) -1
- ( ) 1
- ( ) 0
- ( ) -infinity

Question # 3 of 10 (Start time: 12:41:01 PM, 21 July 2023) **Total Marks:** 1

If the standard deviation of a population is 9, the population variance is:

Select the correct option

- ○ 21
- ○ 3
- ● 81
- ○ 9

Question # 4 of 10 (Start time: 12:41:37 PM, 21 July 2023) **Total Marks: 1**

For a data, mean is equal to median then its distribution is

Select the correct option

○	asymmetrical
○	right asymmetrical
●	symmetrical
○	left asymmetrical

Question # 5 of 10 (Start time: 12:42:24 PM, 21 July 2023) **Total Marks: 1**

The intercept of a line passing through origin is

Select the correct option

- (●) zero
- ( ) positive
- ( ) does not exists
- ( ) finite

Question # 6 of 10 (Start time: 12:43:21 PM, 21 July 2023) **Total Marks:** 1

The sum of deviation of the observed values of Yi from the regression line is always equal to

Select the correct option

- 1
- -1
- 0
- None

Question # 7 of 10 (Start time: 12:44:50 PM, 21 July 2023) **Total Marks: 1**

In scatter diagram, clustering of points around a straight line indicates

Select the correct option

○	b) Non-linear regression
○	d) Both (a) and (b)
○	c) Curvilinear linear regression
●	a) Linear regression

Question # 8 of 10 (Start time: 12:46:23 PM, 21 July 2023) **Total Marks: 1**

Evaluate 30! / 28!. (! means factorial)

Select the correct option

- (●) 870
- ( ) 30
- ( ) 650
- ( ) 28

Question # 9 of 10 (Start time: 12:47:41 PM, 21 July 2023) **Total Marks: 1**

Suppose the slope of regression line is -20 and the intercept is 9, then the equation of regression line will be ----------

Select the correct option

- y - 20x +9 = 0
- y -20x -9 = 0
- y +20x -9 = 0
- y +20x +9 = 0

Question # 10 of 10 (Start time: 12:48:51 PM, 21 July 2023) **Total Marks:** 1

A relationship between variables that can be represented by a straight line equation is

Select the correct option

- Simple linear regression model
- Non linear regression model
- Population regression model
- Non linear equation