

Questions	Option1	Option2	Option3	Option4
The standard deviation of -5, -5, -5, -5, -5 is:	-5	5	0	-25
If $Y = -10X$ and $X = -0.1Y$, then b_{xy} is equal to:	-0.1	1	-1	-10
If $Y = -10X$ and $X = -0.1Y$, then r is equal to:	0.1	1	-1	-10
If $Y = -10X$ and $X = -0.1Y$, then b_{yx} is equal to:	0.1	1	-1	-10
The correlation coefficient between X and $-X$ is:	0	0.5	1	-1
If $b_{yx} = -0.8$ and $b_{xy} = -0.2$, then r_{yx} is equal to:	-0.2	-0.4	0.4	-0.8
If $b_{yx} = 1.6$ and $b_{xy} = 0.4$, then r_{xy} will be:	0.4	0.64	0.8	-0.8
If the points on the scatter diagram show no tendency either to increase together or decrease together the value of r will be close to:	-1	1	0.5	0
If there are ten values each equal to 10, then standard deviation of these values is:	100	20	10	0
If $b_{yx} = -2$ and $r_{xy} = -1$, then b_{xy} is equal to:	-1	-2	-0.5	0.5
If mean is Rs.20, $S = Rs.10$, then coefficient of variation is:	45%	50%	60%	65%
If $Q_3 = 20$ and $Q_1 = 10$, the coefficient of quartile deviation is:	3	0.3333	0.6666	1
If $b_{xy} = 0.20$ and $r_{xy} = 0.50$, then b_{yx} is equal to:	0.2	0.25	0.5	1.25
If $r_{xy} = 0.75$, then correlation coefficient between $u = 1.5X$ and $v = 2Y$ is:	0	0.75	-0.75	1.5
In simple regression equation, the numbers of variables involved are:	0	1	2	3
The mean of an examination is 69, the median is 68, the mode is 67, and the standard deviation is 3. The measure of variation for this examination is:	67	68	69	3
If regression line of $y = 5$, then value of regression coefficient of Y on X is:	0.5	0	1	5
If regression line of $y = 5$, then value of intercept of regression line Y on X is:	0.5	0	1	5
If the arithmetic mean of the two numbers X_1 and X_2 is 5 if $X_1 = 3$, then X_2 is:	3	7	5	10
The mean of 10 observations is 10. All the observations are increased by 10%. The mean of increased observations will be:	10	1.1	10.1	11
The mean of 100 observations is 10. All the observations are increased by 20%. The mean of increased observations will be:	10	1.2	10.2	12
If the harmonic mean of the two numbers X_1 and X_2 is 6.4 and if $X_2 = 16$, then X_1 is:	4	10	16	20
If the harmonic mean of the two numbers X_1 and X_2 is 16 and if $X_2 = 16$, then X_1 is:	4	10	16	20
Ten families have an average of 2 boys. How many boys do they have together?	2	10	12	20
The range of the values -5, -8, -10, 0, 6, 10 is:	0	10	-10	20
For a certain distribution, if $\sum(X - 20) = 25$, $\sum(X - 25) = 0$, then mean is equal to	20	25	-20	35

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An automobile manufacturer obtains data concerning the sales of six of its deals in the last week of 1996. The results indicate that their sales variance equals 36 autos sq. If this is so, the standard deviation of their sales equals:	6	01-Jun	1296	36
An automobile manufacturer obtains data concerning the sales of six of its deals in the last week of 1996. The results indicate the standard deviation of their sales equals 6 autos. If this is so, the variance of their sales equals:	6	01-Jun	0.333	36
If the maximum value in a series is 25 and its range is 15, the minimum value of the series is:	10	15	25	40
If the observations of a variable X are, -4, -20, -30, -44 and -36, then the value of the range will be:	-48	40	-40	48
The range of the scores 29, 3, 143, 27, 99 is:	140	143	146	70
If the geometric of the two numbers X1 and X2 is 9 and if X1=9, then X2 is equal to:	3	9	27	81
If the geometric of the two numbers X1 and X2 is 9 and if X1=3, then X2 is equal to:	3	9	27	81
If mean of X is 100 and Y=2X – 200, then mean of Y values will be:	0	3	100	200
The sum of the squares of the deviations about mean is:	Zero	Maximum	Minimum	All of these
The dependent variable is also called:	Regression	Independent	Regressand	Continuous variable
Any measure indicating the centre of a set of data, arranged in an increasing or decreasing order of magnitude, is called a measure of:	Skewness	Symmetry	Central tendency	Dispersion
Which of the following statements is always true?	The mean has an effect on extreme scores	The median has an effect on extreme scores	Extreme scores have an effect on the mean	Extreme scores have an effect on the median
Harmonic mean gives less weightage to:	Small values	Large values	Positive values	Negative values
Scores that differ greatly from the measures of central tendency are called:	Raw scores	The best scores	Extreme scores	Z-scores
A perfect positive correlation is signified by:	0	-1	1	(-1 to +1)
The range of regressioin coefficient is:	(-1, 1)	(0, 1)	(-?, ?)	(0, ?)
The value of the coefficient of correlation r lies between:	(1, 0)	(-1, 0)	(-1, 1)	(-0.5, 0.5)
The sample mean of first n natural numbers is:	$n(n+1) / 2$	$(n+1) / 2$	$n/2$	$(n+1) / 4$
If a = 5 and b = -5, then their harmonic mean is:	5	-5	0	?
If the arithmetic mean of 20 values is 10, then sum of these 20 values is:	10	20	200	20+10
Given below the four sets of observations. Which set has the minimum variation?	46, 48, 50, 52, 54	30, 40, 50, 60, 70	40, 50, 60, 70, 80	48, 49, 50, 51, 52

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The variance of 19, 21, 23, 25 and 27 is 8. The variance of 14, 16, 18, 20 and 22 is:	Greater than 8	8	Less than 8	$8-5=3$
If all the values in a series are same, then:	A.M = G.M = H.M	A.M ? G.M ? H.M	A.M > G.M > H.M	A.M < G.M < H.M
Geometric mean is suitable when the values are given as:	Proportions	Ratios	Percentage rates	All of the these
If $Y = 2 - 0.2X$, then value of regression coefficient of Y on X is:	-0.2	2	0.2x	all of these
If $Y = 2 - 0.2X$, then the value of Y intercept is equal to:	-0.2	2	0.2x	all of these
The dependent variable is also called:	Regressand variable	Predictand variable	Explained variable	All of these
Mean deviation is always calculated from:	Mean	Median	Mode	any of these
Positive regression coefficient indicates that the movement of the variables are in:	Same direction	Opposite direction	Difficult to tell	anything
Negative regression coefficient indicates that the movement of the variables are in:	Same direction	Opposite direction	Difficult to tell	anything
When regression line passes through the origin, then:	Intercept is zero	Regression coefficient is zero	Correlation is zero	Association is zero
If X is measured in hours and Y is measured in minutes, then correlation coefficient has the unit:	Hours	No unit	Minutes	Both units
If $r_{xy} = 1$, then:	$b_{yx} = b_{xy}$	$b_{yx} > b_{xy}$	$b_{yx} < b_{xy}$	$b_{yx} \cdot b_{xy} = 1$
If $r_{xy} = 0$, then:	$b_{yx} = 0$	$b_{yx} > b_{xy}$	$b_{xy} = 0$	$b_{yx} = 0 = b_{xy}$
To compare the variation of two or more than two series, we use	Combined standard deviation	Corrected standard deviation	Coefficient of variation	Coefficient of skewness
Which of the following measures of dispersion is expressed in the same units as the units of observation?	Variance	Standard deviation	Coefficient of variation	Coefficient of standard deviation
The average of squared deviations from mean is called:	Mean deviation	Variance	Standard deviation	Coefficient of variation
The ratio of the standard deviation to the arithmetic mean expressed as a percentage is called:	Coefficient of standard deviation	Coefficient of skewness	Coefficient of kurtosis	Coefficient of variation
The sample mean is a:	Parameter	Statistics	Variable	Constant
If $b_{yx} = b_{xy} = 1$ and $S_x = S_y$, then r will be:	0	1	-1	Difficult to say
If $b_{yx} = b_{xy} = -1$, then r will be:	0	1	-1	Difficult to say
Given $X_1=20$ and $X_2= -20$. The arithmetic mean will be:	Zero	Infinity	Impossible	Difficult to tell

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The standard deviation is independent of:	Change of origin	Change of scale of measurement	Change of origin and scale of measurement	Difficult to tell
Given $X_1=200$ and $X_2= -100$. The arithmetic mean will be:	0	50	Impossible	Difficult to tell
The value we would predict for the dependent variable when the independent variables are all equal to zero is called:	Slope	Sum of residual	Intercept	Difficult to tell
If $Y= 16 + X$, then r will be:	0	1	-1	Difficult to tell
If $Y= 6 - X$, then r will be:	0	1	-1	Difficult to tell
If a statistics professor tells his class: "All those who got 100 on the statistics test got 20 on the mathematics test, and all those that got 100 on the mathematics test got 20 on the statistics test", he is saying that the correlation between the statistics test and the mathematics test is:	Positive	Zero	Negative	Difficult to tell
It is only possible that two regression coefficients have:	Opposite signs	No sign	Same signs	Difficult to tell
If a constant value is subtracted from every observation of data, then arithmetic mean is obtained by	Subtracting the constant	Adding the constant	Multiplying the constant	Dividing the constant
If a constant value is added to every observation of data, then arithmetic mean is obtained by	Subtracting the constant	Adding the constant	Multiplying the constant	Dividing the constant
The measures of dispersion can never be:	Positive	Zero	Negative	Equal to 2
In simple linear regression, the numbers of unknown constants are:	One	Two	Three	Four
The suitable average for qualitative data is:	Mean	Median	Mode	Geometric mean
We must arrange the data before calculating:	Mean	Median	Mode	Geometric mean
If the data contains an extreme value, the suitable average is:	Mean	Median	Weighted mean	Geometric mean
In a given data the average which has the least value is:	Arithmetic Mean	none of these	Harmonic mean	Geometric mean
Which pair of averages cannot be calculated when one of numbers in the series is zero?	Geometric mean and Median	Harmonic mean and Mode	Simple mean and Weighted mean	Geometric mean and Harmonic mean
When $r_{xy} < 0$, then b_{yx} and b_{xy} will be:	Not equal to zero	Zero	Less than zero	Greater than zero
When $r_{xy} > 0$, then b_{yx} and b_{xy} will be:	Not equal to zero	Zero	Less than zero	Greater than zero

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The total of all the observations divided by the number of observations is called:	Arithmetic mean	Geometric mean	Median	Harmonic mean
Step deviation method or coding method is used for computation of the:	Arithmetic mean	Geometric mean	Weighted mean	Harmonic mean
If the smallest observation in a data is decreased, the average which is not affected is:	Mode	Median	Mean	Harmonic mean
If any value in a series is negative, then we cannot calculate the:	Mean	Median	Geometric mean	Harmonic mean
The harmonic mean of the values 5, 9, 11, 0, 17, 13 is:	9.5	6.2	0	impossible
If the value of any regression coefficient is zero, then two variables are:	Qualitative	Correlated	Dependent	Independent
If one regression coefficient is greater than one, then other will be:	More than one	Equal to minus one	Equal to one	Less than one
A relationship where the flow of the data points is best represented by a curve is called:	Linear relationship	Nonlinear relationship	Linear positive	Linear negative
Change of origin and scale is used for calculation of the:	Arithmetic mean	Geometric mean	Weighted mean	Lower and upper quartiles
Standard deviation is always calculated from:	Mean	Median	Mode	Lower quartile
Which measure of dispersion has a different unit other than the unit of measurement of values:	Range	Standard deviation	Variance	Mean deviation
The measurements of spread or scatter of the individual values around the central point is called:	Measures of dispersion	Measures of central tendency	Measures of skewness	Measures of kurtosis
The correlation coefficient is the _____ of two regression coefficients:	Geometric mean	Arithmetic mean	Harmonic mean	Median
The ratio among the number of items and the sum of reciprocals of items is called:	Arithmetic mean	Geometric mean	Harmonic mean	Mode
If one regression coefficient is less than minus one, then other will be:	More than one	Equal to minus one	Equal to one	More than minus one
If the dispersion is small, the standard deviation is:	Large	Zero	Small	Negative
The signs of regression coefficients and correlation coefficient are always:	Different	Same	Positive	Negative
The value of standard deviation remains unchanged by a change of:	Origin	Scale	Algebraic signs	None
The value of standard deviation changes by a change of:	Origin	Scale	Algebraic signs	None
The elimination of extreme scores at the top of the set has the effect of:	Lowering the mean	Raising the mean	No effect	None of the above
The elimination of extreme scores at the bottom of the set has the effect of:	Lowering the mean	Raising the mean	No effect	None of the above
The averages are affected by change of:	Origin	Scale	Both origin and scale	None of the above

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Three factories A, B, C have 100, 200 and 300 workers respectively. The mean of the wages is the same in the three factories. Which of the following statements is true?	There is greater variation in factory C.	Standard deviation in factory A is the smallest.	Standard deviation in all the three factories are equal	None of the above
In the regression equation $Y = a + bX$, the X is called:	Independent variable	Dependent variable	Continuous variable	None of the above
In the regression equation $Y = a + bX$, a is called:	X-intercept	Y-intercept	Dependent variable	None of the above
In the regression equation $Y = a + bX$, the Y is called:	Independent variable	Dependent variable	Continuous variable	None of the above
Extreme scores will have the following effect on the median of an examination:	They may have no effect on it	They may tend to raise it	They may tend to lower it	None of the these
Regression coefficient is independent of change of:	Origin	Scale	Scale and origin	None of them
The straight line graph of the linear equation $Y = a + bX$, slope will be downward if:	$b < 0$	$b > 0$	$b = 0$	none of these
The regression lines always pass through point:	(X, Y)	(\bar{x}, \bar{y})	(a, b)	none of these
The straight line graph of the linear equation $Y = a + bX$, slope is horizontal if:	$b = 1$	$b = 0$	$a = b$	none of these
The correlation coefficient is used to determine:	A specific value of the y-variable given a specific value of the x-variable	A specific value of the x-variable given a specific value of the y-variable	The strength of the linear relationship between the x and y variables	None of these
If each observation of a variable X is increased by 20%, then geometric mean is also increased by:	20	20-Jan	20%	none of these
The correlation coefficient is the _____ of two regression coefficients:	Arithmetic mean	Harmonic mean	Median	none of these
Geometric mean of -4, -2 and -8 is:	-4	0	-2	not possible
Geometric mean of -4, -2 and 8 is:	2	0	-2	not possible
The purpose of simple linear regression analysis is to:	none of these	Replace points on a scatter diagram by a straight-line	Measure the degree to which two variables are linearly associated	Obtain the expected value of the dependent random variable for a given value of the independent variable
When b_{xy} is positive, then b_{yx} will be:	Negative	Positive	Zero	One

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When bxy is positive, then r will be:	Negative	Positive	Zero	One
If both variables X and Y increase or decrease simultaneously, then the coefficient of correlation will be:	Negative	Zero	Positive	One
If the two series move in reverse directions and the variations in their values are always proportionate, it is said to be:	Negative correlation	Positive correlation	Perfect negative correlation	Perfect positive correlation
If the two series move in same directions and the variations in their values are always proportionate, it is said to be:	Negative correlation	Positive correlation	Perfect negative correlation	Perfect positive correlation
The independent variable is also called:	Regressor	Estimated	Regressand	Predctand
To determine the height of a person when his weight is given is:	Correlation problem	Association problem	Regression problem	qualitative problem
The slope of the regression line of Y on X is also called the:	Correlation coefficient of X on Y	Correlation coefficient of Y on X	Regression coefficient of X on Y	Regression coefficient of Y on X
A measure of the strength of the linear relationship that exists between two variables is called:	Intercept	Correlation coefficient	Slope	Regression equation
The population mean μ is called:	Discrete variable	Continuous variable	Parameter	Sampling unit
All data points falling along a straight line is called:	Linear relationship	Non linear relationship	Residual	Scatter diagram
The degree to which numerical data tend to spread about an average value called:	Constant	Flatness	Variation	Skewness
A process by which we estimate the value of dependent variable on the basis of one or more independent variables is called:	Correlation	Regression	Residual	Slope
The measure of dispersion which uses only two observations is called:	Range	Quartile deviation	Mean deviation	Standard deviation
The measure of central tendency listed below is:	The raw score	The mean	The range	Standard deviation
Half of the difference between upper and lower quartiles is called:	Interquartile range	Quartile deviation	Mean deviation	Standard deviation
If $b_{yx} = b_{xy} = r_{xy}$, then:	$S_x \neq S_y$	$S_x > S_y$	$S_x = S_y$	$S_x < S_y$
If there are many extreme scores on all examination, the dispersion is:	Large	Small	Normal	Symmetric
If all the scores on examination cluster around the mean, the dispersion is said to be:	Small	Large	Normal	Symmetrical
The scatteredness in a series of values about the average is called:	Central tendency	Dispersion	Skewness	Symmetry
If the figure +1 signifies perfect positive correlation and the figure -1 signifies a perfect negative correlation, then the figure 0 signifies:	A perfect correlation	Not significant	Weak correlation	Uncorrelated variables

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If one item is fixed and unchangeable and the other item varies, the correlation coefficient will be:	Positive	Negative	Zero	Undecided
The arithmetic mean is highly affected by:	Moderate values	Extreme values	Odd values	we can't say
When two regression coefficients bear same algebraic signs, then correlation coefficient is:	Negative	According to the signs of regression coefficients	Positive	Zero
If the points on the scatter diagram indicate that as one variable increases the other variable tends to decrease the value of r will be:	Perfect positive	positive	Negative	Zero