

No.	Questions	A	B	C	D
1.	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
2.	The method of least squares dictates that we choose a regression line where the sum of the square of deviations of the points from the line is:	Maximum	Minimum	Zero	Positive
3.	All data points falling along a straight line is called:	Linear Relationship	Non linear relationship	Residual	Scatter diagram
4.	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
5.	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
6.	In simple linear regression, the numbers of unknown constants are:	One	Two	Three	Four
7.	In simple regression equation, the numbers of variables involved are:	0	1	2	3
8.	If the value of any regression coefficient is zero, then two variables are:	Qualitative	Correlated	Dependent	Independent
9.	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
10.	The straight line graph of the linear equation $Y = a + bX$, slope is horizontal if:	$b = 1$	$b = 0$	$a = b$	none of these
11.	If regression line of $y = 5$, then value of regression coefficient of Y on X is:	0.5	0	1	5
12.	If $Y = 2 - 0.2X$, then the value of Y intercept is equal to:	-0.2	2	0.2x	all of these
13.	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
14.	If regression line of $y = 5$, then value of intercept of regression line Y on X is:	0.5	0	1	5

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15.	If $Y = 2 - 0.2X$, then value of regression coefficient of Y on X is:	-0.2	2	0.2x	all of these
16.	The dependent variable is also called:	Regression	Independent	Regressand	Continuous variable
17.	To determine the height of a person when his weight is given is:	Correlation problem	Association problem	Regression problem	qualitative problem
18.	The independent variable is also called:	Regressor	Estimated	Regressand	Predictand
19.	The dependent variable is also called:	Regressand variable	Predictand variable	Explained variable	All of these
20.	In the regression equation $Y = a + bX$, the Y is called:	Independent variable	Dependent variable	Continuous variable	None of the above
21.	In the regression equation $Y = a + bX$, the X is called:	Independent variable	Dependent variable	Continuous variable	None of the above
22.	In the regression equation $Y = a + bX$, a is called:	X-intercept	Y-intercept	Dependent variable	None of the above
23.	When regression line passes through the origin, then:	Intercept is zero	Regression coefficient is zero	Correlation is zero	Association is zero
24.	When b_{xy} is positive, then b_{yx} will be:	Negative	Positive	Zero	One
25.	The correlation coefficient is the of two regression coefficients:	Geometric mean	Arithmetic mean	Harmonic mean	Median
26.	The correlation coefficient is the of two regression coefficients:	Arithmetic mean	Harmonic mean	Median	none of these
27.	When two regression coefficients bear same algebraic signs, then correlation coefficient is:	Negative	According to the signs of regression coefficients	Positive	Zero
28.	It is only possible that two regression coefficients have:	Opposite signs	No sign	Same signs	Difficult to tell
29.	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

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30.	A measure of the strength of the linear relationship that exists between two variables is called:	Intercept	Correlation coefficient	Slope	Regression equation
31.	If both variables X and Y increase or decrease simultaneously, then the coefficient of correlation will be:	Negative	Zero	Positive	One
32.	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
33.	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
34.	If one item is fixed and unchangeable and the other item varies, the correlation coefficient will be:	Positive	Negative	Zero	Undecided
35.	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
36.	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
37.	The value of the coefficient of correlation r lies between:	(1, 0)	(-1, 0)	(-1, 1)	(-0.5, 0.5)
38.	If X is measured in hours and Y is measured in minutes, then correlation coefficient has the unit:	Hours	No unit	Minutes	Both units
39.	The range of regression coefficient is:	(-1, 1)	(0, 1)	(-?, ?)	(0, ?)
40.	The signs of regression coefficients and correlation coefficient are always:	Different	Same	Positive	Negative

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41. Negative regression coefficient indicates that the movement of the variables are in:	Same direction	Opposite direction	Difficult to tell	anything
42. Positive regression coefficient indicates that the movement of the variables are in:	Same direction	Opposite direction	Difficult to tell	anything
43. If $b_{yx} = b_{xy} = 1$ and $S_x = S_y$, then r will be:	0	1	-1	Difficult to say
44. The correlation coefficient between X and $-X$ is:	0	0.5	1	-1
45. If $b_{yx} = b_{xy} = r_{xy}$, then:	$S_x \neq S_y$	$S_x > S_y$	$S_x = S_y$	$S_x < S_y$
46. If $r_{xy} = 0.75$, then correlation coefficient between $u = 1.5X$ and $v = 2Y$ is:	0	0.75	-0.75	1.5
47. If $b_{yx} = -2$ and $r_{xy} = -1$, then b_{xy} is equal to:	-1	-2	-0.5	0.5
48. If $b_{yx} = 1.6$ and $b_{xy} = 0.4$, then r_{xy} will be:	0.4	0.64	0.8	-0.8
49. If $b_{yx} = -0.8$ and $b_{xy} = -0.2$, then r_{yx} is equal to:	-0.2	-0.4	0.4	-0.8
50. If $Y = 16 + X$, then r will be:	0	1	-1	Difficult to tell
51. If $Y = 6 - X$, then r will be:	0	1	-1	Difficult to tell
52. If $Y = -10X$ and $X = -0.1Y$, then r is equal to:	0.1	1	-1	-10
53. 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
54. A perfect positive correlation is signified by:	0	-1	1	(-1 to +1)
55. 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

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56.	If $r_{xy} = 1$, then:	$byx = b_{xy}$	$byx > b_{xy}$	$byx < b_{xy}$	$byx \cdot b_{xy} = 1$
57.	When $r_{xy} < 0$, then byx and b_{xy} will be:	Not equal to zero	Zero	Less than zero	Greater than zero
58.	When $r_{xy} > 0$, then byx and b_{xy} will be:	Not equal to zero	Zero	Less than zero	Greater than zero
59.	If $r_{xy} = 0$, then:	$byx = 0$	$byx \neq b_{xy}$	$b_{xy} = 0$	$byx = 0 = b_{xy}$
60.	If $b_{xy} = 0.20$ and $r_{xy} = 0.50$, then byx is equal to:	0.2	0.25	0.5	1.25
61.	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
62.	The scatteredness in a series of values about the average is called:	Central tendency	Dispersion	Skewness	Symmetry
63.	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
64.	The degree to which numerical data tend to spread about an average value called:	Constant	Flatness	Variation	Skewness
65.	The measures of dispersion can never be:	Positive	Zero	Negative	Equal to 2
66.	If all the scores on examination cluster around the mean, the dispersion is said to be:	Small	Large	Normal	Symmetrical
67.	If there are many extreme scores on all examination, the dispersion is:	Large	Small	Normal	Symmetric
68.	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
69.	The measure of dispersion which uses only two observations is called:	Range	Quartile deviation	Mean deviation	Standard deviation
70.	The range of the scores 29, 3, 143, 27, 99 is:	140	143	146	70
71.	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

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72.	The range of the values -5, -8, -10, 0, 6, 10 is:	0	10	-10	20
73.	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
74.	Half of the difference between upper and lower quartiles is called:	Interquartile range	Quartile deviation	Mean deviation	Standard deviation
75.	If $Q_3=20$ and $Q_1=10$, the coefficient of quartile deviation is:	3	0.3333	0.6666	1
76.	The average of squared deviations from mean is called:	Mean deviation	Variance	Standard deviation	Coefficient of variation
77.	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
78.	Which measure of dispersion has a different unit other than the unit of measurement of values:	Range	Standard deviation	Variance	Mean deviation
79.	If the dispersion is small, the standard deviation is:	Large	Zero	Small	Negative
80.	The value of standard deviation changes by a change of:	Origin	Scale	Algebraic signs	None
81.	If there are ten values each equal to 10, then standard deviation of these values is:	100	20	10	0
82.	The standard deviation is independent of:	Change of origin	Change of scale of measurement	Change of origin and scale of measurement	Difficult to find
83.	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
84.	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
85.	The standard deviation of -5, -5, -5, -5, -5 is:	-5	5	0	-25

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86.	Standard deviation is always calculated from:	Mean	Median	Mode	Lower quartile
87.	Mean deviation is always calculated from:	Mean	Median	Mode	any of these
88.	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
89.	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
90.	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
91.	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
92.	If mean is Rs.20, S= Rs.10, then coefficient of variation is:	45%	50%	60%	65%
93.	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
94.	Scores that differ greatly from the measures of central tendency are called:	Raw scores	The best scores	Extreme scores	Z-scores
95.	The measure of central tendency listed below is:	The raw score	The mean	The range	Standard deviation
96.	The total of all the observations divided by the number of observations is called:	Arithmetic mean	Geometric mean	Median	Harmonic mean

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97.	Change of origin and scale is used for calculation of the:	Arithmetic mean	Geometric mean	Weighted mean	Lower and upper quartiles
98.	The sample mean is a:	Parameter	Statistics	Variable	Constant
99.	The population mean \bar{x} is called:	Discrete variable	Continuous variable	Parameter	Sampling unit
100.	The arithmetic mean is highly affected by:	Moderate values	Extreme values	Odd values	we can't say
101.	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
102.	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
103.	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
104.	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
105.	The sum of the squares of the deviations about mean is:	Zero	Maximum	Minimum	All of these
106.	For a certain distribution, if $\sum (X - 20) = 25$, $\sum (X - 25) = 0$, then mean is equal to	20	25	-20	35
107.	Step deviation method or coding method is used for computation of the:	Arithmetic mean	Geometric mean	Weighted mean	Harmonic mean
108.	If the arithmetic mean of 20 values is 10, then sum of these 20 values is:	10	20	200	20+10
109.	Ten families have an average of 2 boys. How many boys do they have together?	2	10	12	20
110.	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
111.	Given $X_1=20$ and $X_2= -20$. The arithmetic mean will be:	Zero	Infinity	Impossible	Difficult to tell

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112.	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
113.	The sample mean of first n natural numbers is:	$n(n+1) / 2$	$(n+1) / 2$	$n/2$	$(n+1) / 4$
114.	The suitable average for qualitative data is:	Mean	Median	Mode	Geometric mean
115.	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
116.	We must arrange the data before calculating:	Mean	Median	Mode	Geometric mean
117.	If the smallest observation in a data is decreased, the average which is not affected is:	Mode	Median	Mean	Harmonic mean
118.	If the data contains an extreme value, the suitable average is:	Mean	Median	Weighted mean	Geometric mean
119.	The ratio among the number of items and the sum of reciprocals of items is called:	Arithmetic mean	Geometric mean	Harmonic mean	Mode
120.	Geometric mean of -4, -2 and 8 is:	2	0	-2	not possible
121.	If any value in a series is negative, then we cannot calculate the:	Mean	Median	Geometric mean	Harmonic mean
122.	Geometric mean is suitable when the values are given as:	Proportions	Ratios	Percentage rates	All of the these
123.	If each observation of a variable X is increased by 20%, then geometric mean is also increased by:	20	Jan-20	20%	none of these
124.	If the geometric of the two numbers X1 and X2 is 3 and if X1=3, then X2 is equal to:	3	9	27	81
125.	Harmonic mean gives less weightage to:	Small values	Large values	Positive values	Negative values
126.	If the harmonic mean of the two numbers X1 and X2 is 6.4 and if X2=16, then X1 is:	4	10	16	20

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127.	If $a = 5$ and $b = -5$, then their harmonic mean is:	5	-5	0	?
128.	The harmonic mean of the values 5, 9, 11, 0, 17, 13 is:	9.5	6.2	0	impossible
129.	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
130.	If all the values in a series are same, then:	$A.M = G.M = H.M$	$A.M ? G.M ? H.M$	$A.M > G.M > H.M$	$A.M < G.M < H.M$
131.	The averages are affected by change of:	Origin	Scale	Both origin and scale	None of the above
132.	In a given data the average which has the least value is:	Arithmetic Mean	none of these	Harmonic mean	Geometric mean