

Question # 1 of 30 (Start time: 04:01:46 PM, 27 December 2020)

First moment about mean will be equal to:

Select the correct option



0



Mean



Median



Variance

Question # 2 of 30 (Start time: 04:02:19 PM, 27 December 2020)

For a Normal distribution, b_2 (moment ratio) will be:

Select the correct option



Greater than 3



Less than 3



Equal to 3



Equal to zero

Question # 3 of 30 (Start time: 04:03:15 PM, 27 December 2020)

The total of frequency up to an upper class limit or boundary is known as:

Select the correct option



average frequency



cumulative frequency



frequency distribution



frequency polygon

Question # 4 of 30 (Start time: 04:04:00 PM, 27 December 2020)

If coefficient of skewness is equal to "0" then distribution will be:

Select the correct option



Positively skewed



Negatively skewed



Symmetrical



Asymmetrical

Question # 5 of 30 (Start time: 04:04:20 PM, 27 December 2020)

Quota sampling is an example of:

Select the correct option



Random sampling



Non random sampling



Simple random sampling



None of these

Question # 6 of 30 (Start time: 04:04:57 PM, 27 December 2020)

Mean value for the given distribution will be:

X	0	1	2	3
f(x)	1/8	3/8	3/8	1/8

Select the correct option



3/8



6/8



12/8



24/8

Question # 7 of 30 (Start time: 04:06:25 PM, 27 December 2020)

T

To determine the class interval

Select the correct option



Divide the class frequencies in half



Divide the class frequency by the number of observations



Find the difference between consecutive lower class limits



Count the number of observations in the class

Question # 8 of 30 (Start time: 04:07:46 PM, 27 December 2020)

A frequency curve touches x-axis:

Select the correct option



Some times



Yes



No



None of these

Question # 9 of 30 (Start time: 04:08:50 PM, 27 December 2020)

What is the median for the following values:

1.2, 0.25, 1.75, 2.15, 1.50

Select the correct option



1.2



1.5



1.75



2.15

Question # 10 of 30 (Start time: 04:09:15 PM, 27 December 2020)

The concept of "five number summary" directly linked with the concept of:

Select the correct option



Polygon curve



Frequency curve



Box and whisker plot



Scatter plot

Question # 10 of 30 (Start time: 04:09:15 PM, 27 December 2020)

The concept of "five number summary "directly linked with the concept of:

Select the correct option



Polygon curve



Frequency curve



Box and whisker plot



Scatter plot

Question # 11 of 30 (Start time: 04:10:06 PM, 27 December 2020)

T

If $\mu = 3.82$ and $S.D(X) = 1.2$, then $C.V(X)$ will be:

Select the correct option



20.482



24.896



31.412



26.451

Question # 11 of 30 (Start time: 04:10:06 PM, 27 December 2020)

T

If $\mu = 3.82$ and $S.D(X) = 1.2$, then $C.V(X)$ will be:

Select the correct option



20.482



24.896



31.412



26.451

Question # 12 of 30 (Start time: 04:11:01 PM, 27 December 2020)

Observed data organized into tabular form is called:

Select the correct option



A bar chart



A pie chart



A frequency polygon



A frequency distribution

Question # 13 of 30 (Start time: 04:11:32 PM, 27 December 2020)

Fourth moment about mean provides information about the _____ of the distribution.

Select the correct option



Centre



Dispersion



Symmetry



Kurtosis

Question # 13 of 30 (Start time: 04:11:32 PM, 27 December 2020)

Fourth moment about mean provides information about the _____ of the distribution.

Select the correct option



Centre



Dispersion



Symmetry



Kurtosis

Question # 14 of 30 (Start time: 04:12:42 PM, 27 December 2020)

The amount of hump of a distribution is called:

Select the correct option



Skewness



Kurtosis



Symmetry



Dispersion

Question # 15 of 30 (Start time: 04:14:03 PM, 27 December 2020)

T

Which of the following averages give information about central value in the distribution?

Select the correct option



Mean



Median



Mode



Harmonic mean

Question # 16 of 30 (Start time: 04:15:46 PM, 27 December 2020)

In a class, there are 15 boys and 10 girls. Three students are selected at random. The probability that 1 girl and 2 boys are selected, is:

Select the correct option



21/46



27/112



1/50



3/25

Question # 17 of 30 (Start time: 04:17:12 PM, 27 December 2020)

In case of positively skewed distribution:

▶ Select the correct option

 $Q1+Q2-2\text{median}<0$  $Q1+Q2-2\text{median}>0$  $Q1+Q2-2\text{median}=0$ 

None of these

Question # 17 of 30 (Start time: 04:17:12 PM, 27 December 2020)

In case of positively skewed distribution:

Select the correct option

 $Q1 + Q2 - 2\text{median} < 0$  $Q1 + Q2 - 2\text{median} > 0$  $Q1 + Q2 - 2\text{median} = 0$ 

None of these

Question # 18 of 30 (Start time: 04:18:33 PM, 27 December 2020)

The function abbreviated to d.f. is also called the.....

Select the correct option



Probability density function



Probability distribution function



Commutative distribution function



Discrete function

Question # 19 of 30 (Start time: 04:20:00 PM, 27 December 2020)

T

The measure of Dispersion can never be:

▶ Select the correct option



Positive



Negative



0



1

Question # 19 of 30 (Start time: 04:20:00 PM, 27 December 2020)

T

The measure of Dispersion can never be:

Select the correct option



Positive



Negative



0



1

Question # 20 of 30 (Start time: 04:21:09 PM, 27 December 2020)

If we have mean=6, median =5 and standard deviation = 4 then the Pearson's Coefficient of Skewness will be:

Select the correct option



0.25



0.75



0.5



0.7

Question # 21 of 30 (Start time: 04:22:03 PM, 27 December 2020)

In a box, there are 8 red, 7 blue and 6 green balls. One ball is picked up randomly. What is the probability that it is neither red nor green?

Select the correct option

 $1/3$  $7/19$  $8/21$  $3/4$

Question # 22 of 30 (Start time: 04:22:32 PM, 27 December 2020)

In case of a frequency distribution, the first quartile is given by the formula:

Select the correct option



$$l + \frac{h}{f} \left(\frac{n}{2} - 2c \right)$$



$$l + \frac{f}{h} \left(\frac{n}{2} - c \right)$$



$$l + \frac{h}{f} \left(\frac{n}{4} - c \right)$$



$$l + \frac{f}{h} \left(\frac{n}{4} - c \right)$$

Question # 23 of 30 (Start time: 04:23:11 PM, 27 December 2020)

A graph of plotted points which shows the relationship between two sets of data is known as:

Select the correct option



Venn diagram



Polygon curve



Histogram diagram



Scatter diagram

Question # 24 of 30 (Start time: 04:24:37 PM, 27 December 2020)

T

The algebraic sum of deviations from mean is:

Select the correct option



Maximum



minimum



Zero



undefined

Question # 25 of 30 (Start time: 04:25:06 PM, 27 December 2020)

A bag contains 12 red balls and 12 blue balls. A ball is drawn at random. The probability that ball drawn is red is

Select the correct option



$1/2$



$5/11$



$6/10$



1

Question # 26 of 30 (Start time: 04:26:34 PM, 27 December 2020)

T

If a box contains two red and three yellow balloons then probability of yellow balloons will be equal to:

Select the correct option

 $2/5$  $1/5$  $3/5$  $4/5$

Question # 27 of 30 (Start time: 04:27:05 PM, 27 December 2020)

T

Complement of the event B will be

Select the correct option

 $1 + P(B)$  $1 - P(B)$  $P(B)$  $P(B) - 1$

Question # 28 of 30 (Start time: 04:27:25 PM, 27 December 2020)

Given the least squares regression line $\hat{Y} = 2 + 0.3x$:

Select the correct option



the relationship between x and y is positive.



the relationship between x and y is negative



as x decreases, so does y



None of the above

Question # 29 of 30 (Start time: 04:28:03 PM, 27 December 2020)

A bag contains 4 white, 5 red and 6 blue balls. Three balls are drawn at random from the bag. The probability that all of them are red, is:

Select the correct option



1/22



3/22



2/91



2/77

ANSWER

Let S be the sample space

$\Rightarrow n(S)$ = number of ways of drawing 3 balls out of 15

$${}^{15}C_3 = \frac{15 \times 14 \times 13}{3 \times 2 \times 1} = 455$$

Let E be the event of getting all of the 3 red balls.

$$\therefore n(E) = {}^5C_3 = {}^5C_2 = \frac{5 \times 4}{2 \times 1} = 10$$

$$\therefore P(E) = \frac{n(E)}{n(S)} = \frac{10}{455} = \frac{2}{91}$$

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Question # 30 of 30 (Start time: 04:29:25 PM, 27 December 2020)

According to Empirical rule, approximately 68% of the measurements will fall within:

Select the correct option



(Mean-S.D, Mean+S.D)



(Mean-2S.D, Mean+2S.D)



(Mean-3S.D, Mean+3S.D)



None of these