

## Statistics and Probability (STA301)

Question: 1 (Marks: 1)

Attempted Questions: 4

Total Questions: 23

A five-number summary consists of :

## Choices:

  $X_0, Q_1, \text{Median}, Q_3, \text{ and } X_m$   $X_m, Q_1, \text{Mean}, Q_3, \text{ and } X_0$   $X_m, Q_1, \text{Mode}, Q_3, \text{ and } X_0$   $X_0, Q_1, \text{Median}, Q_2, \text{ and } X_m$

## Statistics and Probability (STA301)

Question: 3 (Marks: 1)

Attempted Questions: 4

Total Questions: 23

In a multiplication theorem  $P(A \cap B)$  equals:

## Choices:

$P(A) P(B)$

$P(A) + P(B)$

$P(A) * P(B|A)$

$P(B|A) * P(B)$

## Statistics and Probability (STA301)

Question: 4 (Marks: 1)

Attempted Questions: 4

Total Questions: 23

The probability of drawing a 'white' ball from a bag containing 4 red, 8 black and 3 white balls is:

## Choices:

 0  $\frac{3}{15}$   $\frac{1}{12}$   $\frac{1}{2}$

## Statistics and Probability (STA301)

Question: 5 (Marks: 1)

Attempted Questions: 4

Total Questions: 23

If  $\hat{y}$  is the predicted value for a given  $x$ -value and  $b$  is the  $y$ -intercept then the equation of a regression line for an independent variable  $x$  and a dependent variable  $y$  is:

## Choices:

$\hat{y} = mx + b$ , where  $m = \text{slope}$

$x = \hat{y} + mb$ , where  $m = \text{slope}$

$\hat{y} = x/m + b$ , where  $m = \text{slope}$

$\hat{y} = x + mb$ , where  $m = \text{slope}$

## Statistics and Probability (STA301)

Question: 6 (Marks: 1)

Attempted Questions: 5

Total Questions: 23

If  $A$  and  $B$  are mutually exclusive events then  $P(A \text{ or } B)$  equals:

## Choices:

$P(A) + P(B) - P(A \text{ and } B)$

$P(A) \times P(B)$

$P(A) + P(B)$

$P(A|B) + P(B|A)$

## Statistics and Probability (STA301)

Question: 7 (Marks: 1)

Attempted Questions: 6

Total Questions: 23

The simultaneous occurrence of two events is called:

## Choices:

 Prior probability Subjective probability Conditional probability Joint probability

## Statistics and Probability (STA301)

Question: 8 (Marks: 1)

Attempted Questions: 7

Total Questions: 23

First moment about origin is always equals to:

.....

## Choices:

 Mean Variance Standard Deviation Zero

Which one of the following measurement does *not* divide a set of observations into equal parts?

## Choices:

quartiles

deciles

percentiles

standard deviations



## Statistics and Probability (STA301)

Question: **10** (Marks: 1)Attempted Questions: **9**Total Questions: **23**

If the first and third quartiles are 22.16 and 56.36 respectively, then the quartile deviation is:

## Choices:

 17.1 34.2 51.3 50.5

The height of a student is 60 inches. This is an example of .....?

**Choices:**

Continuous data

Qualitative data

Categorical data

Discrete data

## Statistics and Probability (STA301)

Question: 12 (Marks: 1)

Attempted Questions: 11 Total Questions: 23

Which one of the following statements is true regarding a sample?

## Choices:

It is a part of population

It must contain at least five observations

It refers to descriptive statistics

It produces True value

## Statistics and Probability (STA301)

Question: **13** (Marks: 1)Attempted Questions: **12** Total Questions: **23**

Which one of the following graphs is used for a time series data?

## Choices:

 Histogram Historigram Frequency curve Frequency polygon

## Statistics and Probability (STA301)

Question: 14 (Marks: 1)

Attempted Questions: 13

Total Questions: 23

Which of the following comes first to make frequency distribution.

## Choices:

 No. of Groups Class interval Range Tally marks

## Statistics and Probability (STA301)

Question: **15** (Marks: 1)Attempted Questions: **14** Total Questions: **23**

The average which is defined as the reciprocal of the arithmetic mean of the reciprocals of the values is called:

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## Choices:

 Geometric Mean Harmonic Mean Mode Median

## Statistics and Probability (STA301)

Question: **16** (Marks: 1)Attempted Questions: **15** Total Questions: **23**

If a car is running at the rate of 15km/hr during first 30km, at 20km/hr during the second 30km, which type of average will be used to find the average speed/hr:

## Choices:

 Weighted Mean Harmonic Mean Arithmetic Mean Geometric Mean

Statistics and Probability (STA301)

Question: **19** (Marks: 2)

Attempted Questions: **23**

Total Questions: **23**

Differentiate between simple and compound events.

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## Statistics and Probability (STA301)

Question: **22** (Marks: 5)Attempted Questions: **23** Total Questions: **23**

Two events are casted:  $E_1$  is the event that a 6 appears on at least one die,  $E_2$  is the event that a 5 appear on exactly one die. Are  $E_1$  and  $E_2$  independent?

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## Statistics and Probability (STA301)

Question: **23** (Marks: 5)Attempted Questions: **23** Total Questions: **23**

How many distinct four-digits number can be performed from the following integers 1,2,3,4,5,6 if each integer is used only once?

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