

Question # 1 of 30 (Start time: 04:33:12 PM, 27 December 2020)

Let A and B are two dependent events such that $P(A)=1/4$, $P(A|B)=1/2$ and $P(B|A)=2/3$. Find $P(A \cap B)$.

Select the correct option



1/8



1/6



2/3



1/4

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Select the correct option



1/8



1/6



2/3



1/4

Question # 3 of 30 (Start time: 04:35:09 PM, 27 December 2020)

r is a pure number that lies between:

Select the correct option



0 to 1



-1 to +1



0 to ∞



None

Question # 4 of 30 (Start time: 04:35:34 PM, 27 December 2020)

The mean is obtained by

Select the correct option



Divides a set of data into two equal parts



Most frequent value in the data set



Dividing the sum of all observations by their number



None of these

Question # 5 of 30 (Start time: 04:35:48 PM, 27 December 2020)

If $P(A \text{ or } B) = P(A) + P(B)$, then A and B are:

Select the correct option



Mutually exclusive events



Independent events



Exhaustive events



Equally likely events

Question # 6 of 30 (Start time: 04:36:19 PM, 27 December 2020)

In a frequency distribution the categories must

Select the correct option



Be mutually exclusive



Have at least 5 observations



Be of the same size



Be of nominal scale

Question # 7 of 30 (Start time: 04:37:50 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 # 8 of 30 (Start time: 04:38:06 PM, 27 December 2020)

From a pack of 52 cards, two cards are drawn together at random. What is the probability of both the cards being kings?

Select the correct option



1/15



25/57



1/122



1/221

C $\frac{35}{256}$

D None of the above

Study later

ANSWER

Two cards can be drawn from a pack of 52 playing cards in $^{52}C_2$ ways,

$$\text{i.e., } \frac{52 \times 51}{2} = 1326 \text{ ways}$$

The event that two kings appear in a single draw can appear in 4C_2 ways, i.e., 6 ways,

$$\therefore \text{The probability that the two cards drawn from a pack of 52 cards are kings} = \frac{6}{1326} = \frac{1}{221}$$

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Question # 8 of 30 (Start time: 04:38:06 PM, 27 December 2020)

From a pack of 52 cards, two cards are drawn together at random. What is the probability of both the cards being kings?

Select the correct option



1/15



25/57



1/122



1/221

Question # 9 of 30 (Start time: 04:39:16 PM, 27 December 2020)

The standard deviation of c (constant) is equal to:

Select the correct option



c



c square



0



$2c$

Question # 10 of 30 (Start time: 04:40:23 PM, 27 December 2020)

Probability of an impossible event is always:

Select the correct option



Less than one



Greater than one



Between one and zero



Zero

Question # 11 of 30 (Start time: 04:41:15 PM, 27 December 2020)

Relation between arithmetic, geometric and harmonic mean is:

Select the correct option



Arithmetic Mean $\geq$ Geometric Mean $\geq$ Harmonic Mean



Harmonic Mean $\geq$ Geometric Mean $\geq$ Arithmetic Mean



Arithmetic Mean $\geq$ Harmonic Mean $\geq$ Geometric Mean



None

Question # 12 of 30 (Start time: 04:41:40 PM, 27 December 2020)

If one card is selected at random from a deck of 52 playing cards, what is the probability that the card is a club or a face card or both?

Select the correct option



22/52



21/52



20/52



52/22

Question # 13 of 30 (Start time: 04:42:24 PM, 27 December 2020)

What is the value of class mark for the given class 10-12?

Select the correct option



8



9



10



11

Question # 14 of 30 (Start time: 04:43:17 PM, 27 December 2020)

When two dice are rolled the number of possible sample points are:

Select the correct option



6



12



24



36

Question # 15 of 30 (Start time: 04:43:37 PM, 27 December 2020)

The number of elements in the Power set $P(S)$ of the set $S = \{ \emptyset, 1, \{2, 3\} \}$ is:

Select the correct option



2



4



8



6

Question # 16 of 30 (Start time: 04:44:10 PM, 27 December 2020)

For a non-symmetric (Skewed) distributions median is than/to mean

Select the correct option



Equal



Greater



Less



Greater or less (Not equal)

Question # 17 of 30 (Start time: 04:44:31 PM, 27 December 2020)

For a perfect symmetric curve distance from Q1 to median is to the distance from median to Q3.

Select the correct option



Greater



Less



Equal



None of the above

Question # 18 of 30 (Start time: 04:45:05 PM, 27 December 2020)

By using identity law A U S is equal to:

Select the correct option



A



S



A&S



None of them

Question # 19 of 30 (Start time: 04:45:24 PM, 27 December 2020)

Correlation COEFFICIENT measures:

Select the correct option



Dispersion



Skewness



Degree of linear relationship between two random variables



Dependence of one variable to other variable

Question # 20 of 30 (Start time: 04:46:20 PM, 27 December 2020)

For a particular data set the Pearson's coefficient of skewness is greater than zero. What will be the shape of distribution?

Select the correct option



Negatively Skewed



Positively Skewed



Symmetrical



None of the above

Question # 21 of 30 (Start time: 04:47:04 PM, 27 December 2020)

A card is drawn from a pack of 52 cards. The probability of getting a queen of club or a king of heart is:

Select the correct option



1/13



2/13



1/26



1/52

Question # 22 of 30 (Start time: 04:47:28 PM, 27 December 2020)

From a group of 7 men and 6 women, five persons are to be selected to form a committee so that at least 3 men are there on the committee. In how many ways can it be done?

Select the correct option



564



645



756



865

Question # 23 of 30 (Start time: 04:48:13 PM, 27 December 2020)

A case, in which the third parties or witnesses are provided the information to the investigator is called

Select the correct option



Direct Personal investigation



Indirect investigation



Collection through Questionnaires



Collection through local sources

Question # 24 of 30 (Start time: 04:48:35 PM, 27 December 2020)

The number of classes in a frequency distribution generally should be:

Select the correct option



Less than five



More than five



Between five and twenty



Between ten and twenty

Question # 25 of 30 (Start time: 04:49:31 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 # 26 of 30 (Start time: 04:49:53 PM, 27 December 2020)

The number of ways in which four books can be arranged on a shelf are:

Select the correct option



4



6



12



24

Question # 27 of 30 (Start time: 04:50:40 PM, 27 December 2020)

When A and B are two non-empty and mutually exclusive events, then:

Select the correct option



$$P(A \cup B) = P(A) \cdot P(B)$$



$$P(A \cup B) = P(A) + P(B)$$



$$P(A \cap B) = P(A) \cdot P(B)$$



$$P(A \cap B) = P(A) + P(B)$$

Question # 28 of 30 (Start time: 04:51:18 PM, 27 December 2020)

Geometric Mean gives the equal weightage to _____ values

Select the correct option



Smaller Values



Larger Values



Both smaller and larger values



All the observations

Question # 29 of 30 (Start time: 04:51:42 PM, 27 December 2020)

If a box contains six red, three blue and five pink ties then probability of blue ties will be equal to:

Select the correct option



1/14



3/14



5/14



6/14

Question # 30 of 30 (Start time: 04:52:09 PM, 27 December 2020)

If two events A and B are not mutually exclusive then

Select the correct option



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



$$P(A \text{ or } B) = P(A) + P(B)$$



$$P(A \text{ or } B) = P(A) \times P(B)$$



$$P(A \text{ or } B) = P(A) + P(B)$$