CA FOUNDATION

CODE : SS12

Shivani
Sharma

Que. If A and B are two independent events and $P(A \cup B) = 2/5$; $P(B) = 1/3$. Find $P(A)$.

(a) 2/9

(b) -1/3

(c) 2/10

(d) 1/10

MATHS

CA FOUNDATION

CODE : SS12

Shivani
Sharma

Que. A random variable X has the following probability distribution.

X	0	1	2	3
P(x)	0	2K	3K	K

Then, $P(x < 3)$ would be :

(a) 1/6

(b) 1/3

(c) 2/3

(d) 5/6

MATHS

CA FOUNDATION

CODE : SS12

Shivani
Sharma

Que. P(A) = 2/3; P(B) = 3/5; P(A∪B) = 5/6. Find P(B/A)

(a) 11/20

(b) 13/20

(c) 13/18

(d) None

MATHS

CA FOUNDATION

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Shivani
Sharma

Que. If $P(A \cap B) = P(A) \times P(B)$, then the events are:

(a) Independent events

(b) Mutually exclusive events

(c) Exhaustive events

(d) Mutually inclusive events

MATHS

CA FOUNDATION

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Shivani
Sharma

Que. E(XY) is also known as:

(a) E(X) + E(Y)

(b) E(X) E(Y)

(c) E(X) - E(Y)

(d) E(X) ÷ E(Y)

MATHS

CA FOUNDATION

CODE : SS12

Shivani
Sharma

Que. In a bag, there were 5 white, 3 red, and 2 black balls. Three balls are drawn at a time what is the probability that the three balls drawn are white?

(a) 1/12

(b) 1/24

(c) 1/120

(d) None of these

MATHS

CA FOUNDATION

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Shivani
Sharma

Que. In a pack of playing cards with two jokers probability of getting king of spade is

(a) 4/13

(b) 4/52

(c) 1/52

(d) 1/54

MATHS

CA FOUNDATION

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Shivani
Sharma

Que. If x be the sum of two numbers obtained when two die are thrown simultaneously then $P(x \geq 7)$ is

(a) 5/12

(b) 7/12

(c) 11/15

(d) 3/8

MATHS

CA FOUNDATION

CODE : SS12

Shivani
Sharma

Que. A dice is thrown once. What is the mathematical expectation of the number on the dice ?

(a) 16/6

(b) 13/2

(c) 3.5

(d) 4.5

MATHS

CA FOUNDATION

CODE : SS12

Shivani
Sharma

Que. If P(A/B) = P(A), then A and B are

(a) Mutually exclusive events

(b) Dependent events

(c) Independent events

(d) Composite events

MATHS

CA FOUNDATION

CODE : SS12

Shivani
Sharma

Que. A bag contains 3 white and 5 black balls and second bag contains 4 white and 2 black balls. If one ball is taken from each bag, the probability that both the balls are white is _____

(a) 1/3

(b) 1/4

(c) 1/2

(d) None of these

MATHS

CA FOUNDATION

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Shivani
Sharma

Que. The odds in favour of A solving a problem is 5 : 7 and odds against B solving the same problem is 9 : 6. What is the probability that if both of them try, the problem will be solved?

(a) 117/180

(b) 181/200

(c) 147/180

(d) 119/180

MATHS

CA FOUNDATION

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Shivani
Sharma

Que. Consider

Urn I : 2 white balls, 3 black balls

Urn II : 4 white balls, 6 black balls

One ball is randomly transferred from first to second Urn, then one ball is drawn from II Urn. The probability that drawn ball is white is

(a) 22/65

(b) 22/46

(c) 22/55

(d) 21/45

MATHS

CA FOUNDATION

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Shivani
Sharma

Que. If $P(A \cup B) = P(A)$, Find $P(A \cap B)$.

(a) $P(A) \cdot P(B)$

(b) $P(A)+P(B)$

(c) 0

(d) $P(B)$

MATHS

CA FOUNDATION

CODE : SS12

Shivani
Sharma

Que. A bag contains 5 Red balls, 4 Blue Balls and ‘m’ Green Balls. If the random probability of picking two green balls is 1/7. What is the no. of green Balls (m).

(a) 5

(b) 7

(c) 6

(d) None of the above

MATHS

CA FOUNDATION

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Shivani
Sharma

Que. The probability of Girl getting scholarship is 0.6 and the same probability for Boy is 0.8. Find the probability that at least one of the categories getting scholarship.

(a) 0.32

(b) 0.44

(c) 0.92

(d) None of the above

MATHS

CA FOUNDATION

CODE : SS12

Shivani
Sharma

Que. Exactly 3 girls are to be selected from 5 Girls and 3 Boys. The probability of selecting 3 Girls will be _____.

(a) 5/28

(b) 1/56

(c) 15/28

(d) None

MATHS

CA FOUNDATION

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Shivani
Sharma

Que. One Card is drawn from pack of 52, what is the probability that it is a king or a queen?

(a) 11/13

(b) 2/13

(c) 1/13

(d) None of these

MATHS

CA FOUNDATION

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Shivani
Sharma

Que. In a packet of 500 pens, 50 are found to be defective. A pen is selected at random. Find the probability that it is non defective.

(a) 8/9

(b) 7/8

(c) 9/10

(d) 2/3

MATHS

CA FOUNDATION

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Shivani
Sharma

Que. Four married couples have gathered in a room. Two persons are selected at random amongst them, find the probability that selected persons are a gentleman and a lady but not a couple.

(a) 1/7

(b) 3/7

(c) 1/8

(d) 3/8

MATHS

CA FOUNDATION

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Shivani
Sharma

Que. A card is drawn out of a standard pack of 52 cards. What is the probability of drawing a king or red colour?

(a) 1/4

(b) 4/13

(c) 7/13

(d) 1/2

MATHS

CA FOUNDATION

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Shivani
Sharma

Que. A player tosses two fair coins, he wins ₹ 5 if 2 heads appear, ₹ 2 if one head appears and ₹ 1 if no head occurs. Find his expected amount of winning.

(a) 2.5

(b) 3.5

(c) 4.5

(d) 5.5

MATHS

CA FOUNDATION

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Shivani
Sharma

Que. Arun & Tarun appear for an interview for two vacancies. The probability of Arun's selection is 1/3 and that of Tarun's selection is 1/5 Find the probability that only one of them will be selected.

(a) 2/5

(b) 4/5

(c) 6/5

(d) 8/5

MATHS

CA FOUNDATION

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Shivani
Sharma

Que. Two dice are thrown together. Find the probability of getting a multiple of 2 on one 1st dice and multiple of 3 on the other dice.

(a) 2/3

(b) 1/6

(c) 1/3

(d) None of the above

MATHS

CA FOUNDATION

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Shivani
Sharma

Que. A bag contains 6 red balls and some blue balls. If the probability of drawing a blue ball form the bag is twice that of a red ball, find the number of blue balls in the bag

(a) 10

(b) 12

(c) 14

(d) 16

MATHS

CA FOUNDATION

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Shivani
Sharma

Que. A box contains 2 red, 3 green and 2 blue balls. Two balls are drawn at random. What is the probability that none of the balls drawn is blue?

(a) 10/21

(b) 11/21

(c) 2/7

(d) 5/7

MATHS

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Shivani
Sharma

Que. Find the probability of drawing an ace on each of two consecutive draws from a well shuffled pack of cards, without replacement

(a) 2/51

(b) 1/221

(c) 4/51

(d) 5/51

MATHS

CA FOUNDATION

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Shivani
Sharma

Que. An unbiased die is thrown twice. The probability of the sum of numbers obtained on the two faces being divisible by 4 is:

(a) 7/36

(b) 1/3

(c) 11/36

(d) 1/4

MATHS

CA FOUNDATION

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Shivani
Sharma

Que. Two broad divisions of probability are:

(a) Subjective probability and objective probability

(b) Deductive probability and mathematical probability

(c) Statistical probability and mathematical probability

(d) None of these

MATHS

CA FOUNDATION

CODE : SS12

Shivani
Sharma

Que. Ram is known to hit a target in 2 out of 3 shots where as Shyam is known to hit the same target in 5 out of 11 shots. What is the probability that the target would be hit if they both try?

(a) 9/11

(b) 3/11

(c) 10/33

(d) 6/11

MATHS

CA FOUNDATION

CODE : SS12

Shivani
Sharma

Que. Two letters are chosen from the word HOME. What is the probability that the letters chosen are not vowels.

(a) 1/2

(b) 1/6

(c) 2/3

(d) 0

MATHS

CA FOUNDATION

CODE : SS12

Shivani
Sharma

Que. When 2 fair dice are thrown what is the probability of getting the sum which is a multiple of 3 ?

(a) 4/36

(b) 13/36

(c) 2/36

(d) 12/36

MATHS

CA FOUNDATION

CODE : SS12

Shivani
Sharma

Que. If there are 48 marbles market with numbers 1 to 48, then the probability of selecting a marble having the number divisible by- 4 is:

(a) 1/2

(b) 2/3

(c) 1/3

(d) 1/4

MATHS

CA FOUNDATION

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Shivani
Sharma

Que. In a group of 20 males and 15 females, 12 males and 8 females are service holders. What is the probability that a person selected at random from the group is a service holder given that the selected person is a male?

(a) 0.40

(b) 0.60

(c) 0.45

(d) 0.55

MATHS

CA FOUNDATION

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Shivani
Sharma

Que. If a number is selected at random from the first 50 natural numbers, what will be the probability that the selected number is a multiple of 3 and 4 ?

(a) 5/50

(b) 2/25

(c) 3/30

(d) 4/25

MATHS

CA FOUNDATION

CODE : SS12

Shivani
Sharma

Que. Four persons are chosen at random frame a group of 3 men, 2 women and 4 children. The probability that exactly 2 of them are children is?

(a) 10/21

(b) 1/12

(c) 1/5

(d) 1/9

MATHS

CA FOUNDATION

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Shivani
Sharma

Que. Company a produces 10% defective products, company B produces 20% defective products, company C produces 5% defective products. If choosing company is an equally likely events. What is probability that the product. Chosen is free from defect.

(a) 0.88

(b) 0.80

(c) 0.79

(d) 0.78

MATHS

CA FOUNDATION

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Shivani
Sharma

Que. The probability distribution of x given below.

Value of x	1	0	Total
Probability	P	1-P	1

Mean is equal to

(a) P

(b) 1 – P

(c) 0

(d) 1

MATHS

CA FOUNDATION

CODE : SS12

Shivani
Sharma

Que. The Probability that a 4-digit number comprising the digit 2, 5, 6 and 7 without repetition of digits would be divisible by 4.

(a) 1/2

(b) 3/4

(c) 1/4

(d) 1/3

MATHS

CA FOUNDATION

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Shivani
Sharma

Que. On a commodity exchange when booking traits with provision for stop strider can make a profit of ₹ 50,000 or incur a loss of ₹ 20,000. The probability of making profit an incurring losses from the part experience are known to be 0.85 and 0.5 respectively. The expected profit to be made by trader should be.

(a) ₹ 32,500

(b) ₹ 35,000

(c) ₹ 30,000

(d) ₹ 35,200

MATHS