



DOON INDIAN DEFENCE ACADEMY

CLASS ASSIGNMENT – PROBABILITY

Q 1. 4 Boys and 2 Girls occupy seats in a row at random. Then the probability that the two girls occupy seats side by side is:

- a. $1/2$ b. $1/4$ c. $1/3$ d. $1/6$

Q 2. An experiment consist of flipping a coin and then flipping it second time if head occurs. If a tail occurs on the first flip, then a six faced die is tossed once. Assuming that the outcomes are equally likely, what is the probability of getting one head and one tail?

- a. $1/4$ b. $1/36$ c. $1/6$ d. $1/8$

Q 3. The probability that in the toss of two dice, we obtain an even sum or a sum less than 5 is

- a. $1/2$ b. $1/6$ c. $1/3$ d. $5/9$

Q 4. In a certain population 10% of the people are rich, 5% are famous and 3% are rich and famous. The probability that a person picked at random from the population is either famous or rich but not both is equal to:

- a. 0.07 b. 0.08 c. 0.09 d. 0.12

Q 5. What is the probability of having 53 Sundays or 53 Mondays in a Leap Year?

- a. $2/7$ b. $3/7$ c. $4/7$ d. $5/7$

Q 6. If A and B are two independent events with $P(A) = 3/5$ and $P(B) = 4/9$, then $P(A' \cap B')$ equals to

- a. $4/15$ b. $8/45$ c. $1/3$ d. $2/9$

Q 7. Two dice are thrown together. Then the probability that the sum of numbers appearing on them is a prime number is?

- a. $5/12$ b. $7/18$ c. $13/36$ d. $11/36$

Q 8. A cricket Team has 15 members, of whom only 5 can ball. If the names of the 15 members are put into a bowl and 11 drawn at random, then the chance of obtaining an eleven containing atleast 3 bowlers is?

- a. $7/13$ b. $11/15$ c. $12/13$ d. $15/14$

Q 9. Two cards are drawn successfully with replacement from a pack of 52 cards. The probability of drawing two aces is?

- a. $\frac{1}{12} * \frac{4}{51}$ b. $\frac{1}{52} * \frac{1}{51}$ c. $\frac{1}{13} * \frac{1}{13}$ d. $\frac{1}{13} * \frac{1}{17}$

Q 10. Of a cigarette smoking population 70% are men and 30% are women, 10% of these men and 20% of these women smoke wills. The probability that a person seen smoking a wills to be men is:

- a. $1/5$ b. $7/13$ c. $5/13$ d. $7/10$

Q 11. If from each of the three boxes containing 3 white and 1 black, 2 white and 2 black, 1 white and 3 black balls, one ball is drawn at random, then the probability that 2 white and 1 black ball will be drawn is?

- a. $13/32$ b. $1/4$ c. $1/32$ d. $3/16$



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Q 12. In solving a problem, odds against A are 4 to 3 and odds in favour of B in solving the same is 7 to 5. Then probability that problem will be solved is?

- a. $5/21$ b. $16/21$ c. $15/84$ d. $69/84$

Q 13. In a college 25% boys and 10% girls offer Mathematics. There are 60% girls in the college. If a Mathematics student is chosen at random, then the probability that the student is a girl, will be?

- a. $1/6$ b. $3/8$ c. $5/8$ d. $5/6$

Q 14. A bag contains 4 white balls and 2 black balls, while another bag Y contains 3 white balls and 3 black balls. Two balls are drawn (without replacement) at random from one of the bags and were found to be one white and one black. Find the probability that the balls were drawn from bag Y?

- a. $9/17$ b. $3/34$ c. $9/34$ d. $18/17$

Q 15. A bag contains 10 black and 5 white balls. Two balls are drawn from the bag one after the other without replacement. What is the probability that both drawn balls are black?

- a. $3/7$ b. $4/7$ c. $2/7$ d. None of these

Q 16. Twelve tickets are numbered from 1 to 12. One ticket is drawn at random, then the probability of the number to be divisible by 2 or 3 is

- a. $2/3$ b. $7/12$ c. $5/6$ d. $3/4$

Q 17. A card is drawn from a well shuffled pack of playing cards. The probability that it is king of heart is

- a. $4/13$ b. $15/52$ c. $18/52$ d. None of these

Q 18. There are 4 Red, 5 Blue and 3 Green marbles in a basket. If two marbles are picked randomly, then the probability that both marbles are red is

- a. $3/7$ b. $1/2$ c. $1/11$ d. $1/6$

Q 19. A committee of two persons is constituted from two men and two women. What is the probability that the committee will have only women?

- a. $1/6$ b. $1/3$ c. $1/2$ d. $2/3$

Q 20. If two fair dice are thrown, then what is the probability that the sum is neither 8 nor 9?

- a. $1/6$ b. $1/4$ c. $3/4$ d. $5/6$

Q 21. Three dice are thrown simultaneously. What is the probability that the sum on the three faces is at least 5?

- a. $17/18$ b. $53/54$ c. $103 / 108$ d. $215 / 216$

Q 22. A coin is tossed 3 times, what is the probability of getting head and tail alternately?

- a. $1/8$ b. $1/4$ c. $1/2$ d. $3/4$

Q 23. A card is drawn from a well shuffled deck of 52 cards. What is the probability that it is queen of spade?

- a. $1/52$ b. $1/13$ c. $1/4$ d. $1/8$