

PROBABILITY-Assignment

1. Two cards are drawn at random from a pack of cards. The probability that both are queens or diamonds is:

- a. $20/221$
- b. $15/221$
- c. $13/221$
- d. $14/221$

Ans: the probability that both cards drawn are either queens or diamonds is $14/221$, which is option d.

2. From a bag containing 6 pink and 8 orange balls, 8 balls are drawn at random. The probability that 5 of them are pink and the rest are orange is.....

- a. $16/143$
- b. $19/143$
- c. $17/143$
- d. $13/143$

Ans: the probability that 5 of the drawn balls are pink and the rest are orange is $16/143$, which is option a.

3. From a box containing a dozen bulbs, of which exactly one half are good, and four bulbs are chosen at random to fit into the four bulb holders in a room. The probability that the room gets lighted is.....

- a. $2/3$
- b. $1/3$
- c. $33/44$
- d. $32/33$

Ans: the probability that the room gets lighted (all chosen bulbs are good bulbs) is $1/3$, which is option b.

4. If 10 letters are to be placed in 10 addressed envelopes, then what is the probability that at least one letter is placed in wrong addressed envelope?

- a. $1/10!$
- b. $1/9!$
- c. $1 - (1/10!)$
- d. $9/10$

Ans: So, the probability that at least one letter is placed in the wrong addressed envelope is $1 - 1/10!$, which is option c.

5. I select three numbers randomly from 1 to 10. What is the probability that their product is an odd number?

- a. $\frac{1}{12}$

b. $\frac{1}{2}$

c. $\frac{3}{4}$

d. $\frac{11}{12}$

Ans: The correct answer is a. $\frac{1}{12}$

6. Ramesh has a garments shop. He currently has 6 black, 4 red, 2 white and 3 blue shirts of same size in the stock. He picks 2 shirts randomly for the display. What is the probability that either both shirts are white or blue?

a. $\frac{1}{105}$

b. $\frac{1}{35}$

c. $\frac{4}{105}$

d. $\frac{1}{15}$

Ans: The correct answer is c. $\frac{4}{105}$

7. There are 6 oranges, 2 pink, 4 yellow and 3 green towels in a carton. What is the probability of picking up 2 orange towels randomly?

a. $\frac{1}{7}$

b. $\frac{2}{15}$

c. $\frac{2}{-}$

$\frac{1}{7}$

d. $\frac{6}{15}$

Ans: The correct answer is a. $\frac{1}{7}$

8. In a bag are 10 red balls and 16 green balls. If two balls are drawn one after the other without replacement, what is the probability that the first is "red" while the second one is "green"?

a. $\frac{18}{145}$

b. $\frac{35}{134}$

c. $\frac{16}{65}$

d. $\frac{17}{29}$

Ans: The correct answer is c. $\frac{16}{65}$

9. One card is drawn at random from a pack of 52 cards. What is the probability that the card drawn is a face card (Jack, Queen and King only)?

A. $\frac{3}{13}$

B. $\frac{1}{13}$

C. $\frac{3}{52}$

D. $\frac{9}{52}$

Ans: The correct answer is B. $\frac{3}{13}$

10. X attempts 94 questions and gets 141 marks. If for every correct answer 4 marks is given, and for every wrong answer 1 mark is deducted, then the number of questions wrongly answered by X is ____.

A. 45

B. 47

C. 57

D. 40

Ans: The correct answer is B. 47

11. Find the probability of selecting 2 woman when four persons are choosen at random from a group of 3 men, 2 woman and 4 children.

- A. $1/5$
- B. $1/6$
- C. $1/7$
- D. $1/9$

Ans: The correct answer is B. $1/6$

12. What is the probability that it is either a heart card or diamond card, when a card is drawn from a well shuffled standard pack of 52 playing cards?

- A. 1
- B. $3/4$
- C. $1/2$
- D. $1/3$

Ans: The correct answer is C. $1/2$

13. In a single throw with 2 dices, what is probability of neither getting an even number on one and nor a multiple of 3 on other?

- A. $11/36$
- B. $25/36$
- C. $5/6$
- D. $1/6$

Ans: The correct answer is C. $5/6$

14. Let K and L be events on the same sample space, with $P(K) = 0.8$ and $P(B) = 0.6$. Are these two events being disjoint?

- A. True
- B. False

Ans: False

15. Tickets numbered 1 to 20 are mixed up and then a ticket is drawn at random. What is the probability that the ticket drawn has a number which is a multiple of 4 or 15?

- A. $6/19$
- B. $3/10$
- C. $7/10$
- D. $6/17$

Ans: The correct answer is C. 3/10.