**Minimum Level Learning Questions**

**Class-IX Chapter-15**

**PROBABILITY**

Q1. A die is thrown once. What will be the probability of getting a prime number?

Q2. Write all possible outcomes when

1. One coin is tossed
2. Two coins are tossed.
3. One die is rolled

Q3. A die is thrown 300 times with the frequencies for the outcomes 1, 2, 3, 4, 5 and 6 as given in the table

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outcome | 1 | 2 | 3 | 4 | 5 | 6 |
| Frequency | 42 | 60 | 55 | 53 | 60 | 30 |

 Find the probability of getting

1. An even number
2. A prime number
3. A number more than 4
4. A number less than or equal to 3

Q4. A box contains 13 Blue, 12 White and 4 red balls. If a ball is drawn at random from the box, what is the probability of getting:

1. White ii) Not Red iii) Blue

Q5. A coin is tossed 1000 times with the following frequencies: Head: 455; Tail: 545. Compute the probability for getting head.

Q6. A box contains slips which are numbered from 1 to 90. If ne disc is drawn at random find the probability of getting:

1. A two-digit number ii) a perfect square number

iii) a number divisible by 5

Q7. A coin is tossed 1000 times and 560 times a “tail” occurs. What is the probability of occurrence of a tail?

Q8. The probability of a sure event is…..

Q9. Can the probability of an event be a negative number? If not, why?

Q10. Can the probability of a number be greater than 1? Justify your answer.

Q11. Two dice are thrown simultaneously 500 times. Each time the sum of two numbers appearing on their tops is noted and recorded as given in the following table:

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SUM | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Frequency | 14 | 30 | 42 | 55 | 72 | 75 | 70 | 53 | 46 | 28 | 15 |

Find the probability of getting sum:

1. 3 ii) more than 10 iii) more than or equal to 5

iv) between 6 and 9

Q12. What is the probability of getting 53 Sundays in a leap year?

Q13. The record of a weather station shows that out of the past 250 consecutive days, its weather forecasts were correct 145 times.

1. What is the probability that on a given day it was correct?
2. What is the probability that it was not correct on the given day?

Q14. Eleven bags of wheat flour, each marked 10 kg, actually contain the following weights of flour:

9.9, 10.01, 10.05, 10.07, 9.95, 9.98, 9.98, 10.08, 10.07, 9.90, 9.99

Find the probability that any of these bags chosen at random contains more than 9.9 kg of flour.

**ANSWERS:**

Q1. $\frac{1}{2}$

Q2. (i) H, T (ii) HH, HT, TH, TT iii) 1, 2, 3, 4, 5, 6

Q3. (i) $\frac{143}{300}$ ii) $\frac{7}{12}$ iii) $\frac{1}{10}$ iv) $\frac{157}{300}$

Q4. (i) $\frac{12}{29}$ ii) $\frac{25}{29}$ iii) $\frac{13}{29}$

Q5. $\frac{91}{200}$

Q6. (i) $\frac{9}{10}$ ii) $\frac{1}{10}$ iii) $\frac{1}{5}$

Q7. $\frac{14}{25}$, $\frac{11}{25}$

Q8. 1

Q9. No, because if the probability of an event is 0 then it is called impossible event. So there can’t be anything less than impossible for an event to occur.

Q10. No, because if the probability of an event is 1 then it is called sure event. So there can’t be anything more than sure for an event to occur.

Q11. (i) $\frac{3}{50}$ ii) $\frac{43}{500}$ iii) $\frac{207}{250}$

Q12. $\frac{2}{7}$

Q13. (i) $\frac{29}{50}$ ii) $\frac{21}{50}$

Q14. $\frac{9}{11}$