1. From a well shuffled pack of 52 cards, find the probability that a card drawn at random is Red.
2. From a well shuffled pack of 52 cards, find the probability that a card drawn at random is an Ace.
3. A tetrahedron is numbered using numbers $1,2,3$ and 4 . If the tetrahedron is rolled, find the probability that it rests on
a) Number 1
b) An even number
c) A number greater than 4
d) A number less than 4
e) A positive number
4. State the probability of the events, in Question 3, to happen using the words No chance, poor chance, even chance, good chance, sure chance
5. A spinner, as shown in the adjoining diagram is rotated. Find the probability of spinner landing on red.

6. Find the probability of getting a number less than 3 when a die, numbered 1 to 6 , is thrown.
7. There are 50 students in a class out of which 20 are girls. If a class representative (CR) is appointed, find the probability that the CR is a girl. What is the probability of the CR to be a boy?
8. A fruit is chosen at random from 5 oranges, 4 apples and 3 mangoes. Find the probability that a mango is chosen.
9. One letter is selected from the word "PROBABILITY". Find the probability that the letter selected is a vowel.
10. A die Is labeled using the letters of the word "INDIAN". If this die is rolled find the probability of getting the following letters on its upper face.
a) I
b) N
c) A
d) P
11. Two dice are thrown; draw the tree diagram of the sample space and hence find the probability that both the numbers are odd.
12. Three coins are tossed; draw the tree diagram of the sample space find the probability of getting all tails.
13. A spinner, as shown In the adjoining diagram is rotated 3 times. Find the probability of spinner landing on red at least twice.

14. A die and a coin are tossed simultaneously, draw the tree diagram of the sample space and find the probability of getting a head and an even number.
15. Three envelopes, brown, white arid pink in colour, each contain 5 letters. The letters in each envelope are of the same colour as the envelop and labeled using the numbers 1 to 5 . One letter is drawn at random from an envelope. Draw the tree diagram and hence find the probability that the letter is pink with label 4
16. Take a coin and toss it 30 times. Tabulate the results and answer the following questions.
a) What is the experimental probability of getting a head?
b) What is the experimental probability of getting a tail?
c) What is the theoretical probability of getting a head?
d) What is the theoretical probability of getting a tail?
17. Spin the spinner shown in the adjoining diagram 60 times. Tabulate the results and answer the following questions
a) What is the experimental probability of getting a 1 ?
b) What is the experimental probability of getting an even number?
c) What is the theoretical probability of getting a 1 ?
d) What is the theoretical probability of getting an even number?
18. Two dice are thrown, find the probability of getting
a) the sum of the two numbers on the dice is 2
b) the sum of the two numbers on the dice is 10
c) the sum of the two numbers on the dice is 12
d) the sum of the two numbers on the dice is 14
19. The following table shows the results of rolling a tetrahedron numbered 1 to 4,60 times.

| 1 | 2 | 2 | 3 | 2 | 1 | 3 | 3 | 3 | 4 | 1 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 4 | 3 | 1 | 3 | 4 | 3 | 2 | 1 | 3 | 2 | 3 | 4 |
| 3 | 4 | 4 | 2 | 2 | 3 | 3 | 3 | 4 | 1 | 3 | 2 |
| 4 | 2 | 3 | 1 | 3 | 3 | 3 | 4 | 3 | 2 | 2 | 2 |
| 4 | 2 | 1 | 1 | 4 | 2 | 4 | 2 | 1 | 1 | 3 | 4 |

2. Use the data to complete the following table.

| Result | Tally Marks | Frequency | Experimental <br> Probability(E) | Theoretical <br> Probability(T) | Is E = T? <br> (Yes/No) |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |
| 3 |  |  |  |  |  |
| 4 |  |  |  |  |  |

3. Match the following.

|  | Event |  | Probability |
| :--- | :--- | ---: | :---: |
| a. | Sure chance | I. | Less than $\frac{1}{2}$ |
| b. | Even chance | II. | 1 |
| c. | No chance | III. | 0 |
| d. | Likely chance | IV. | $\frac{1}{2}$ |
| e. | Unlikely chance | V. | More than $\frac{1}{2}$ |

4. From a well shuffled pack of 52 cards, find the probability that a card drawn at random is of
a) Spades
b) Clubs
c) Diamonds
d) Hearts
5. A bag contains three pairs of shoes of blue, white and black colours. If a shoe is drawn out of the bag, what is the probability that the shoe is black?
6. A coin and a dice, labeled with letters A. B, C. D, E and F are tossed simultaneously. Write the sample space with the help of a tree diagram. Hence, find the probability of gutting a head and a vowel.
7. A the is tossed twice; find the probability of getting the same numbers in both tosses.
