

| M  | T  | W  | T  | F  | S  | S  |
|----|----|----|----|----|----|----|
|    | 2  | 3  | 4  | 5  | 6  | 7  |
| 1  | 8  | 9  | 10 | 11 | 12 | 13 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 |    |    |    |    |    |

JUNE 2020

# Probability

FRIDAY  
MAY 08  
2020  
WEEK 19 (129-237)

Probability means change

Chance or अंशिकता

⇒ Uncertainty can be measured numerically by ~~per~~ Previous data.

Probab Probability of event lies between 0 to 1

Mainly 2 types

- ① Experimental or empirical
- ② theoretical or classical Probability

1 → Experimental → base upon some experiment (class 9)

Experimental probability of any event (E) is

$$P(E) = \frac{\text{No of Trials in which the event happens}}{\text{A total No. of Trials}}$$

Experimental probability is based upon some experiment.

## Theoretical Probability $\Rightarrow$

It has been observed that experimental Prob of an event approaches to its theoretical Prob if No of trials of an experiment is very large.

In this we try to predict the event without performing the experiment.

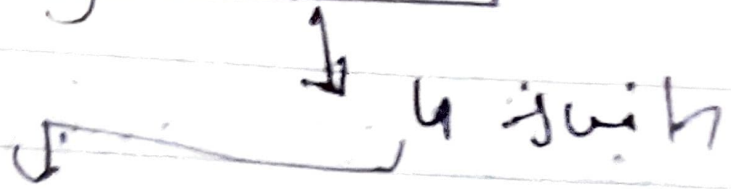
$\Rightarrow$  Performing of experiment to all event is not possible.

$\Rightarrow$  theoretical Probability of an Event  $E$  is defined as

$$P(E) = \frac{\text{No of outcomes fav to } E}{\text{No of all possible outcomes of } E}$$

$$P(E) + P(\text{not } E) = 1$$

# Playing Cards



♠  
Spades

♥  
Heart

♦  
diamond

♣  
Clubs

13

13

13

13

↳ Ace, King, Queen, Jack, 10, 9, 8, 7, 6, 5, 4, 3, 2

Kings, queens, & jacks are face

Cards

## Other Imp. Terms

8  
9  
① Impossible event  $\Rightarrow$  Prob is zero.

10  
11  
12  
② Sure event  $\Rightarrow$  Prob is one.