

Ans at 02: (a)

$$A(3,0) = A(2,1)$$

$$A(2,1) = A(1, A(2,0))$$

$$\begin{aligned} \checkmark A(2,0) &= A(1,1) \\ &= A(0, A(1,0)) \end{aligned}$$

$$\begin{aligned} \checkmark A(1,0) &= A(0,1) \\ &= 2 \quad [i.e. m=0, n+1] \end{aligned}$$

$$\begin{aligned} \checkmark A(2,0) &= A(0,2) \\ &= 2+1 \quad [n+1 \text{ i.e. } m=0] \\ &= 3 \end{aligned}$$

$$\cancel{A(1,2)} \quad A(2,1) = A(1, A(2,0))$$

$$= A(1,3)$$

$$= 3+2 \quad [i.e. m=1, A(m,n) = n+2]$$

$$= 5$$

5

$$A(3,0) = A(2,1)$$

$$= 5$$

$$\begin{aligned} n+1 \\ n+2 \\ 2n+3 \\ 2^n+3 \end{aligned}$$

note:

$$A(0,n) = n+1$$

$$A(1,n) = n+2$$

$$A(2,n) = 2n+3$$

$$\cancel{A(3,n)}$$

cross check,

$$A(3,n) = 2^{n+3} - 3$$

$$A(3,0) = 2^{0+3} - 3$$

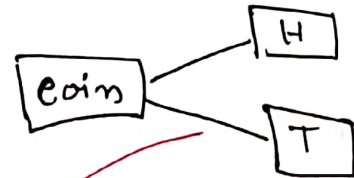
$$= 5$$

Ques ob 02: (b)

Sample point  $S = \{H, T\}$

$$P(H) = \frac{1}{2}$$

5



Ques ob 03: (a)

Dataset	
Data 1	20
Data 2	15
Data 3	16
Data 4	11
Data 5	10
Data 6	16

in rearranged form:

Dataset	
Data 5	10
Data 4	11
Data 2	15
Data 6	16
Data 3	16
Data 1	20
total	= 88

$$\text{Mean } \bar{x} = \frac{88}{6} = 14.66$$

15

$$\text{Med. Mode} = \frac{15+16}{2} = 15.5$$

$$\text{Median} = \frac{15+16}{2} = 15.5$$

$$\text{Mode} = 16$$

(Ans) of Q3: (b)

$$\text{Googol} \rightarrow 10^{100}$$

15

$$\text{Googolplex} \rightarrow (10^{10})^{100}$$

Googol can be define in term of  $10^{100}$   
and googolplex can be define in term of  $10^{10^{100}}$

Ans of Q1: (b)

The sample <sup>set</sup> ~~is~~ <sup>for</sup> dice rolling:  $\{1, 2, 3, 4, 5, 6\}$

If all six numbers were equally likely to appear, then it may have any number from the die roll. For say, I can have 1 or 2 or 3 or 4 or 5 or 6. Hence the probability will be ~~the~~ same. like;

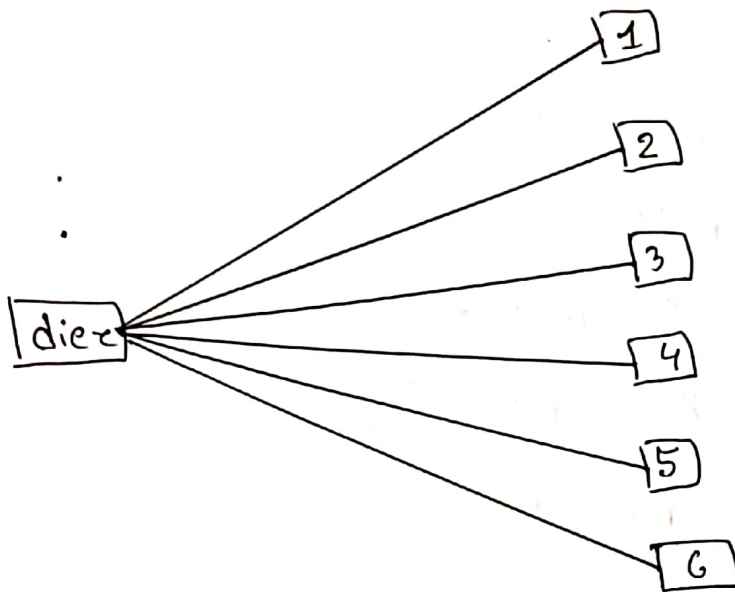
$$P(1) = P(2) = P(3) = P(4) = P(5) = P(6).$$

As the die is rolling for 1 time,

$$P(1) = P(2) = P(3) = P(4) = P(5) = P(6) = \frac{1}{6}$$

10

Ans of Q1: (a)



sample space:  $\{1, 2, 3, 4, 5, 6\}$

prime number set:  $\{2, 3, 5\}$

number of sample set = 6

number of prime number's set = 3

$$P(\text{prime-number}) = \frac{3}{6} = \frac{1}{2}$$

so probability of getting a prime number:  $\frac{1}{2}$  //

NO