1. The probability Sunday is:	of a leap ye	ear selected at	random contain 5	3
_	(b) 1/7	(c) 2/7	(d) 53/365	
2. A bag contains				at
random. The proba	ability of dra	wing a black ba	all is :	
(a) 3/5	(b) 2/5	(c) $0/5$	(d) 1/5	
3. The probability			60.85. What is the	е
probability that it v				
			(d) none of the	
4. What is the pro	bability that	a number selec	cted from the nun	nbers 🦒
(1, 2, 3,,15)				
			(d) 1/3	
5. What are the to	otal outcome	es when we thro	ow three coins?	./
(a) 4	(b) 5	(c) 8	(d) 7	
6. The probability	that a prime	e number selec	ted at random fro	om the
numbers (1,2,3,				
(a) 12/35	(b) 11/3	(c) 13/3	5 (d) none of th	nese
7. The sum of the				•
(a) 2 (b) 1 (c	(d) no	one of these.	
8. The following	probabilities	are given; cho	ose the correct a	nswer
for that which is no	ot possible.			
(a) 0.15	(b) 2/7	(c) 7/5	(d) none of the	se.
9. If three coins a	re tossed sir	nultaneously, t	han the probabilit	ty of
getting at least two	o heads, is:			
(a) 1/4	(b) 3/8	(c) $\frac{1}{2}$	(d) 1/8	
40 A L. II L.				
10. A letter is cho	osen at rando		tters of the word	
ASSASSINATIO		om from the let		as:
♦ ASSASSINATIO	N�. The pro	om from the let bability that th		
♦ ASSASSINATIO	N�. The pro	om from the let bability that th	e letter chosen h	
♦ ASSASSINATIO	N�. The pro (b) 7/13	om from the let bability that th (c) 1	e letter chosen had (d) none of	these.
♦ ASSASSINATIO (a) 6/13	N�. The pro (b) 7/13	om from the let bability that th (c) 1 brobability of g	e letter chosen had (d) none of	these.
ASSASSINATIO(a) 6/1311. A dice is throw	N�. The pro (b) 7/13 vn. Find the p	om from the let bability that th (c) 1 brobability of g	e letter chosen had (d) none of the etting an even number 1	these.
ASSASSINATIO(a) 6/1311. A dice is throw	N. The pro (b) 7/13 vn. Find the p (B) 1	om from the let bability that th (c) 1 probability of go (C) 5/6	(d) none of the etting an even number (D) 1/2	these. mber.
(a) 6/13 11. A dice is throw (A) 2/3 12. Two coins are getting both heads	N. The pro (b) 7/13 In. Find the p (B) 1 thrown at the s.	om from the let bability that th (c) 1 probability of go (C) 5/6 e same time. F	(d) none of the etting an even number (D) 1/2	these. mber.
(a) 6/13 11. A dice is throw (A) 2/3 12. Two coins are	N. The pro (b) 7/13 In. Find the p (B) 1 thrown at the s.	om from the let bability that th (c) 1 probability of go (C) 5/6 e same time. F	(d) none of the etting an even number (D) 1/2	these. mber.

13. Two dice are thrown simultaneously. The probability of getting a sum of 9 is:

(A) 1/10	(B) 3/10	(C) 1/	9 ((D) 4/9			
14. 100 cards are numbered from 1 to 100. Find the probability of getting a prime number.							
(A) 3/4	(B) 27/50	(C) 1/4	•	(D) 29/100			
_	ontains 5 red l a blue ball is d ı a bag is:			-	-		
(A) 5	(B) 10	(C) 15	(D) 20				
		this box. Tl			it is		
(A) 143/130	(D) 147	7/130	(0) 1/23	(D) 1/3	O		
mixed thoro	narked with nu bughly. One ca lity that the nu (B) 1/10	rd is drawn	from this l rd is a perf	box randomly			
18. What is (A) 1/7	the probabilit (B) 53/366	-		nys in a leap y (D) 7/366	ear?		
19. A card is drawn from a well shuffled deck of 52 cards. Find the probability of getting a king of red suit. (A) 1/26 (B) 3/26 (C) 7/52 (D) 1/13							
		•	, ,				
equally likel	e of chance co ly to come to i then the prob B) 1/12	est pointing	g to one of t will point	the number			
21. A game consists of tossing a one rupee coin 3 times and noting its outcome each time. Aryan wins if all the tosses give the same result i.e. three heads or three tails and loses otherwise. Then the probability that Aryan will lose the game. (A) 3/4 (B) 1/2 (C) 1 (D) 1/4							

•	Kajal are friends.is the same birt	Probability that be highly is:	oth will have the			
-		(C) 1/365	(D) 1/133225			
2. Then the pr	x is chosen at rayonable to a chosen at rayonable to a chosen at rayona at r	< 2 is?	umbers -2, -1, 0 , 1,			
24. A jar contains 24 marbles. Some are red and others are white. If a marble is drawn at random from the jar, the probability that it is red is 2/3, then the number of white marbles in the jar is: (A) 10 (B) 6 (C) 8 (D) 7						
Then the prob		multiple of 3 and) natural numbers. 4 is:			
	owing up is prop s is?		robability of a face probability of face			
a) $\frac{1}{7}$	b) $\frac{5}{42}$	c) $\frac{1}{21}$	d) $\frac{4}{21}$			
		n 5 one day match	nes are 50, 70, 82,			
	ne standard devia b) 25.49	c) 25.29	d) 25.69			
28. Find median and mode of the messages received on 9 consecutive days 15, 11, 9, 5, 18, 4, 18, 13, 17.						
a) 13, 15	b) 13, 1 <mark>8</mark>		d) 13, 16			
29. A coin is tossed up 4 times. The probability that tails turn up in 3 cases is						
a) $\frac{1}{2}$ 30. X is a varia	b) $^1\!/_3$ ate between 0 an	c) $\frac{1}{4}$ ad 3. The value of $\frac{1}{4}$ c) 27	$\frac{d}{1}/_{6}$ E(X ²) is			
31. The random variables X and Y have variances 0.2 and 0.5 respectively. Let Z= 5X-2Y. The variance of Z is?						

32.Out of the probability?	_	alues, whicl	n one is not pos	sible in
a) $P(x) = 1$	b) ∑ x d) P(>	P(x) = 3 () = -0.5		
33.If E(x) =	2 and E(z) = 4 b) 6	c) 0	•	sufficient data
34.The cova	ariance of two	independe	nt random varial	ble is
a) 1	b) 0	c) – 1	d) U	ndefined
35.If Σ P(x) a) 0	= k² – 8 then, b) 1	the value o		nsufficient data
, ,	0.5 and x = 4, b) 0.5	• •	? d) 2	
37.In a disc is always?	rete probabilit	y distributio	on, the sum of a	II probabilities
a) 0	b) Infinite	c) 1	d) Un	defined
38.If the pr	obability of hit	ting the tar	get is 0.4, find r	nean and
	b) 0.6,	0.24	c) 0.4, 0.16	d) 0.6, 0.16
-		mbs are dro	· •	ce will strike the n and variance? d) 4, 1.6
a) 2		c) 8	d) 1	nal distribution?

c) 5

d) 7

a) 3

b) 4

				_		d variance and varian		
		of a rand b) E(>			•	*	d) (E(X))2	
43.Me a) E(X)	43.Mean of a random variable X is given by a) E(X)							
44.Mean of a constant 'a' is a) 0								
		of a cons b) a		c) a/2		d) 1		
46.Find the mean and variance of X?								
	Х	0	1	2	3	4		
f((x)	1/9	2/9	3/9	2/9	1/9		
a) 2, 4	/3	b) 3	3, 4/3		c) 2, 2/3	-0	d) 3, 2/3	

47. Find the expectation of a random variable X?

	х	0	1	2	3	
	f(x)	1/6	2/6	2/6	1/6	
a) (0.5		b) 1.5		c) 2.5	d) 3.5

48. In a Binomial Distribution, if p, q and n are probability of success, failure and number of trials respectively then variance is given by

c) np2q

d) npq2

- 49. If 'X' is a random variable, taking values 'x', probability of success and failure being 'p' and 'q' respectively and 'n' trials being conducted, then what is the probability that 'X' takes values 'x'? Use **Binomial Distribution.**
- a) P(X = x) = nCx px qx
- b) P(X = x) = nCx px q(n-x)
- c) P(X = x) = xCn qx p(n-x)
- d) P(x = x) = xCn pn qx
- 50. If 'p', 'q' and 'n' are probability pf success, failure and number of trials respectively in a Binomial Distribution, what is its Standard **Deviation?**

- a) \sqrt{np} b) \sqrt{pq} c) (np)2
- d) \sqrt{npq}