1. The probability of a leap year selected at random contain 53								
Sunday is:								
(a) 53/366	(b) 1/7	(c) 2/ <mark>7</mark>	(d) 53/365					
2. A bag contains 3 red and 2 blue marbles. A marble is drawn at								
	random. The probability of drawing a black ball is :							
		(c) 0/5						
3. The probabili	ity that it will ra	in tomorrow is 0	.85. What is the					
probability that i								
(a) 0.25	(b) 0.145	(c) 3/20	(d) none of these					
•	•		ed from the numbers					
(1, 2, 3,,1	•							
•	•	(c) 2/15	• •					
		s when we throw						
		(c) 8	• •					
-	_	number selecte	d at random from the					
numbers (1,2,3,								
			(d) none of these					
	_	f an event and no						
` '		0 (d) none						
		are given; choos	e the correct answer					
for that which is								
, ,	•		(d) none of these.					
		nultaneously, tha	n the probability of					
getting at least t	wo heads, is:		(1) (1)					
(a) 1/4	(b) 3/8	(C) ½	(d) 1/8					
		m from the lette						
♦ ASSASSINAT	ION�. The pro	bability that the l	etter chosen has:					
(a) 6/13	(b) 7/13	(c) 1	(d) none of these.					
44 4 10 1 11		1 1 111 6						
	-	•	ing an even number.					
(A) 2/3	(B) 1	(C) 5/6	J) 1/ <mark>2</mark>					
12. Two coins are thrown at the same time. Find the probability of getting both heads.								
(A) 3/4 (B) 1/		(D) 0						
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	1/9			
14. 100 cards are numbered from 1 to 100. Find the probability of getting a prime number.							
		(C) 1/4	(D) 29/100			
_	a blue ball is c	louble that of a		If the probability en the number of			
		•	` ,				
16. A box of 600 bulbs contains 12 defective bulbs. One bulb is taken out at random from this box. Then the probability that it is non-defective bulb is:							
(A) 143/150	(B) 14	7/15 <mark>0</mark> (C)	1/25	(D) 1/50			
mixed thoro	oughly. One ca lity that the nu	umbers 2 to 10 ard is drawn fro umber on card (C) 3/10	om this box is a perfect	randomly, then square.			
18. What is the probability of getting 53 Mondays in a leap year? (A) 1/7 (B) 53/366 (C) 2/7 (D) 7/366							
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 like 1,2,312	ly to come to		one of the	number an odd number is:			
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							

22. Riya and Kajal are friends. Probability that both will have the same birthday is the same birthday is:								
(A) 364/365	(B) 31/365	(C) 1/365	(D) 1/133225					
2. Then the pr	x is chosen at rational rations of the company of t	< 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	25. A number is selected at random from first 50 natural numbers. Then the probability that it is a multiple of 3 and 4 is: (A) 7/50 (B) 4/25 (C) 1/25 (D) 2/25							
26. Consider a dice with the property that that probability of a face with n dots showing up is proportional to n. The probability of face showing 4 dots is?								
a) $\frac{1}{7}$	b) $\frac{5}{42}$	c) $\frac{1}{21}$	d) 4 21					
	_	n 5 one day match	nes are 50, 70, 82,					
	ne standard devia b) 25.49		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, 18	c) 18, 15	d) 13, 16					
29. A coin is tossed up 4 times. The probability that tails turn up in 3 cases is								
a) $\frac{1}{2}$	b) $\frac{1}{3}$	c) $^{1}/_{4}$	d) $^{1}/_{6}$					
30. X is a varia a) 8		d 3. The value of loc) 27	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 following values, which one is not possible in probability?								
a) $P(x) = 1$ c) $P(x) = 0.5$		b) ∑ x F d <mark>) P(</mark> x)	P(x) = 3 $0 = -0$	3 5				
33.If E(x) =				•	=?	d) Inqu	ıfficient da	nta
	·		·			,		ita
34.The cov	ariance	e or two i	naepe	naent r	andom v	variabie	e is	
a) 1	b) 0	l	c) -	- 1		d) Und	lefined	
35.If Σ P(x) a) 0					is?	d) Insi	ufficient d	ata
36.If P(x) = a) 1			•	x) = ?		d) 2		
37.In a disc is always?	rete pi	obability	distril	oution,	the sum	of all	probabiliti	es
a) 0	b) Infi	nite	c) 1		1	d) Unde	efined	
38.If the probability of hitting the target is 0.4, find mean and variance.								
a) 0.4, 0.24		b) 0.6, 0	.24		c) 0.4, 0	.16	d) 0.6, 0	.16
39.If the pr target is 60 a) 0.6, 0.24	% and	-	nbs are	dropp		-		
 40. Find the mean of tossing 8 coins. a) 2 b) 4 c) 8 d) 1 41. What is the mean and variance for standard normal distribution? 								

c) 5

d) 7

a) 3

b) 4

a) Mean is 0 and variance is 1 b) Mean is 1 and variance is 0 c) Mean is 0 and variance is ∞ d) Mean is ∞ and variance is 0								
42. Variance of a random variable X is given by a) $E(X)$ b) $E(X2)$ c) $E(X2)$ – $E(X)$ d) $E(X)$ d) $E(X)$								
	43.Mean of a random variable X is given by a) $E(X)$ b) $E(X2)$ c) $E(X2) - (E(X))2$ d) $(E(X))2$							
44.Mean of a constant 'a' is a) 0								
45. Variance of a constant 'a' is a) 0								
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	2	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) ().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

b) npq

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}