1. The probability of a leap year selected at random contain 53 Sunday is:					
(a) 53/366 (b) 1/7 (c) 2/7 (d) 53/365					
2. A bag contains 3 red and 2 blue marbles. A marble is dra	awn at				
random. The probability of drawing a black ball is :					
(a) 3/5 (b) 2/5 (c) 0/5 (d) 1/5					
3. The probability that it will rain tomorrow is 0.85. What is	s the				
probability that it will not rain tomorrow					
(a) 0.25 (b) 0.145 (c) 3/20 (d) none of	f these				
4. What is the probability that a number selected from the					
(1, 2, 3,, 15) is a multiple of 4?					
(a) 1/5 (b) 4/5 (c) 2/15 (d) 1/3					
5. What are the total outcomes when we throw three coins	s?				
(a) 4 (b) 5 (c) 8 (d) 7					
6. The probability that a prime number selected at randon	n from the				
numbers (1,2,3,35) is :					
(a) 12/35 (b) 11/35 (c) 13/35 (d) none of	of these				
7. The sum of the probability of an event and non event is					
(a) 2 (b) 1 (c) 0 (d) none of these.					
8. The following probabilities are given; choose the correct	ct answer				
for that which is not possible.					
(a) 0.15 (b) 2/7 (c) 7/5 (d) none of	f these.				
9. If three coins are tossed simultaneously, than the proba					
getting at least two heads, is:					
(a) $1/4$ (b) $3/8$ (c) $\frac{1}{2}$ (d) $1/8$					
10. A letter is chosen at random from the letters of the wo	ord				
♦ ASSASSINATION ♦ . The probability that the letter chose					
(a) 6/13 (b) 7/13 (c) 1 (d) none					
11. A dice is thrown. Find the probability of getting an even	າ number.				
(A) 2/3 (B) 1 (C) 5/6 (D) 1/2					
12. Two coins are thrown at the same time. Find the probability of getting both heads.					
(A) 3/4 (B) 1/4 (C) 1/2 (D) 0					
13. Two dice are thrown simultaneously. The probability of getting a					

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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			
15. A bag contains 5 red balls and some blue balls .If the probability of drawing a blue ball is double that of a red ball, then the number of blue balls in a bag is:							
(A) 5	(B) 10	(C) 15	(D) 20				
taken out at non- <mark>defecti</mark>	random from ve bulb is:	ontains 12 defe this box. Ther	n the probabi	lity that it is			
(A) 143/150	(B) 147	7/150 (C)	1/25	(D) 1/50			
mixed thoro	oughly. One ca lity that the nu	imbers 2 to 10 ard is drawn fro imber on card (C) 3/10	om this box r is a perfect s	andomly, then square.			
18. What is (A) 1/7	the probabilit (B) 53/366	ty of getting 53 (C) 2/7	Mondays in (D) 7,				
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 1,2,312	y to come to i then the prob	ensists of spinn rest pointing to ability that it w (C) 7/12	one of the r	number n 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 pro	x is chosen at raobability that x ² < 2/5 (C) 3/5	< 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							
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) $\frac{4}{21}$				
27. Runs scored by batsman in 5 one day matches are 50, 70, 82, 93, and 20. The standard deviation is							
		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.							
	b) 13, 18		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) $^{1}/_{3}$	c) $^{1}/_{4}$	d) $^{1}/_{6}$				
		d 3. The value of c) 27					
31. The random variables X and Y have variances 0.2 and 0.5 respectively. Let Z= 5X-2Y. The variance of Z is?							

a) 3	b) 4	c) 5	d) 7				
32.Out of the following values, which one is not possible in probability?							
	b) ∑ x I 5 d) P(x						
33.If E(x) =	= 2 and E(z) = 4,	then E(z – x	() =?				
a) 2	b) 6	c) 0	d) Insufficient data	ì			
34.The cov	ariance of two	independent	random variable is				
a) 1	b) 0	c) - 1	d) Undefined				
•	$) = k^2 - 8$ then,						
a) 0	b) 1	c) 3	d) Insufficient data	a			
36.If P(x) = a) 1	0.5 and x = 4, t b) 0.5	then E(x) = ?	d) 2				
a) i	b) 0.3	C) 4	u) Z				
37.In a disc	37.In a discrete probability distribution, the sum of all probabilities						
is always? a) 0	b) Infinite	c) 1	d) Undefined				
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	б			
39.If the probability that a bomb dropped from a place will strike the							
target is 60% and if 10 bombs are dropped, find mean and variance? a) 0.6, 0.24 b) 6, 2.4 c) 0.4, 0.16 d) 4, 1.6							
40. Find the mean of tossing 8 coins. a) 2 b) 4 c) 8 d) 1							
a) 2 b) 4 c) 8 d) 1 41. What is the mean and variance for standard normal distribution?							

						d variance Ind varian			
42 . a) E		e of a ranc b) E(>			given by 2) - (E(X)		d) (E(X))2		
		a random b) E(X2		_	-		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			
	, 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

- 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}