1. The probability of a leap year selected at random contain 53 Sunday is:					
(a) 53/366 (b) 1/7 (c) 2/7 (d) 53/3	365				
2. A bag contains 3 red and 2 blue marbles. A marble					
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. When the probability that it will rain tomorrow is 0.85.					
probability that it will not rain tomorrow					
(a) 0.25 (b) 0.145 (c) 3/20 (d) nor	ne of these				
4. What is the probability that a number selected from					
(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					
(a) 4 (b) 5 (c) 8 (d) 7					
6. The probability that a prime number selected at rar	ndom from the				
numbers (1,2,3,35) is :					
(a) 12/35 (b) 11/35 (c) 13/35 (d) no	one of these				
7. The sum of the probability of an event and non even					
(a) 2 (b) 1 (c) 0 (d) none of the					
8. The following probabilities are given; choose the co					
for that which is not possible.					
(a) 0.15 (b) 2/7 (c) 7/5 (d) nor	ne of these.				
9. If three coins are tossed simultaneously, than the p					
getting at least two heads, is:	-				
(a) 1/4 (b) 3/8 (c) ½ (d) 1	1/8				
10. A letter is chosen at random from the letters of th					
<b>♦</b> ASSASSINATION <b>♦</b> . The probability that the letter c	hosen has:				
(a) 6/13 (b) 7/13 (c) 1 (d) i					
11. A dice is thrown. Find the probability of getting an	even 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.								
	(B) 27/50	(C) 1/4	(D) 29	9/100				
_	ontains 5 red b a blue ball is do a bag is: (B) 10	ouble that of a		•				
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) 147/150 (C) 1/25 (D) 1/50								
17. Cards marked with numbers 2 to 101 are placed in a box and mixed thoroughly. One card is drawn from this box randomly, then the probability that the number on card is a perfect square.  (A) 9/100 (B) 1/10 (C) 3/10 (D) 19/100								
<b>18.</b> What is the probability of getting <b>53</b> 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	e of chance cor ly to come to re then the proba B) 1/12	est pointing to ability that it w	one of the nui					
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 ra obability that x <sup>2</sup> < 2/5 (C) 3/5	2 is?	ımbers -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:				
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) $^{1}/_{2}$	b) $^{1}/_{3}$		d) $^{1}/_{6}$				
	a <b>te between 0 an</b> o o) 7	<b>d 3. The valu<mark>e</mark> of I</b> ) 27	E(X²) is <mark>-9</mark>				
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 <mark>d) P(</mark> x	P(x) = 3 x = -0.5		
	<b>2 and E(z) = 4</b> b) 6	<b>, then E(z -</b> c) 0	•	sufficient data
34.The cova	ariance of two	independe	nt random varia	ble is
a) 1	b) 0	c) – 1	d) U	Indefined
	<b>= k<sup>2</sup> – 8 then,</b> b) 1			nsufficient data
* *	<b>0.5 and x = 4,</b> b) 0.5		<b>?</b> d) 2	
37.In a disc is always?	rete probabilit	y distributio	on, the sum of a	ıll probabilities
a) 0	b) Infinite	c) 1	d) Ur	ndefined
38.If the pr	obability of hit	ting the tar	get is 0.4, find	mean and
	b) 0.6, (	0.24	c) 0.4, 0.16	d) 0.6, 0.16
-	% and if 10 bo	· ·	pped, find mea	nce will strike the an and variance? d) 4, 1.6
a) 2		c) 8	d) 1	mal distribution?

c) 5

d) 7

a) 3

b) 4

						d variance and varianc		
42. Variance of a random variable X is given by a) $E(X)$ b) $E(X2)$ c) $E(X2)$ – $(E(X))2$							d) (E(X))2	
	<b>43.Mean of a random variable X is given by a)</b> E(X)							
44.N a) 0	44.Mean of a constant 'a' is a) 0							
45.V a) 0	<b>45.Variance of a constant 'a' is</b> .  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, 4/3 c) 2, 2/3 d) 3, 2/3 47. Find the expectation of a random variable X?							
<del>-7</del> / .1	This life expectation of a famous variable A:							

	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

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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)  $\sqrt{npq}$