

## Statistics Ics Part 1 Chapter 8 Online Test

Sr	Questions	Answers Choice
1	The probability density function $p(x)$ cannot exceed.	A. zero B. One C. Mean D. Infinity
2	The probability of success ----- from one trial to another when trials are dependent	A. Remains constant B. Is changed C. One D. Zero
3	Each trial of binomial experiment results in an outcome which can be classified in two categories	A. Head or tail B. Ace or six C. Success and failure D. None of these
4	An expected value of a random variable is equal to its.	A. Variance B. B.D. C. Mean D. Co - Variance
5	The binomial distribution is symmetrical if	A. $p = 1/2$ B. $P > 1/2$ C. $p < 1/2$ D. $P < span style="color: rgb(0, 0, 0); font-family: 'Lucida Sans Unicode', 'Lucida Grande', sans-serif; font-size: 18px; line-height: 23.390625px;">q$
6	If $x$ is a continuous random variable, then the function $f(x)$ is.	A. A probability function B. A probability density function C. A density function D. Both b and c
7	If we do not replace the drawn cards back into the pack before the next draw, the used probability distribution will be:	A. Binomial B. Hypergeometric C. Both binomial & hypergeometric D. None of these
8	The number of possible outcomes in Bernoulli trial is	A. Three B. Four C. Two D. One
9	Mean, Median and mode of binomial distribution can be equal if	B. $P < q < 1/2$ C. $P > q < 1/2$ D. $P < span style="color: rgb(0, 0, 0); font-family: 'Lucida Sans Unicode', 'Lucida Grande', sans-serif; font-size: 18px; line-height: 23.390625px;">q$
10	For a binomial probability distribution: $n = 10$ & the probability of failure ( $q = 0.6$ ), then mean of the distribution is .	A. 0.6 B. 6.0 C. 10 D. 4
11	When $X$ denotes the number of success in binomial experiment, it is called.	A. Random variable B. Binomial random variable C. Continuous random variable D. Both (B) and (C) but not (A)
12	If $(E(X) = E)$ then find arithmetic mean will be.	A. 1 B. 4 C. 0 D. 8
13	When we draw the sample with replacement (the first sample is replaced before the next draw), the probability distribution to be used is:	A. Binomial B. Hypergeometric C. Both Binomial & hypergeometric D. None of these
		A. $E(X) + E(Y)$

- 14 If  $X$  and  $Y$  are random variables, then  $E(X - Y)$  is equal to.  
B.  $E(X) - E(Y)$   
C.  $X - E(Y)$   
D.  $E(X) - Y$
- 15 The expected value of a discrete random variable is.  
A. Always an integer  
B. Always one of the values that the random variable can assume  
C. An interval of values  
D. None of these
- 16 If  $X$  and  $Y$  are independent random variables the S.D.  $(X-Y)$  is equal to  
A.  $\text{Var}(X) - \text{Var}(Y)$   
B.  $\text{Var}(X) + \text{Var}(Y)$   
C.  $E(X-Y)^2$   
D.  $E(X+Y)^2$
- 17 The probability that a continuous random variable 'x' takes on specific value of  $x$  is.  
A. Greater than zero  
B. Less than zero  
C. Equal to zero  
D. 0 to 1
- 18 In a discrete probability distribution the sum of all the probabilities is always  
A. 0  
B. 1  
C. -1  
D. 8
- 19 The mean of binomial distribution is always:  
A. Equal to variance  
B. Less than variance  
C. Greater than variance  
D. None of the these
- 20 When  $x$  denotes the number of success in binomial experiment it is called.  
A. Random variable  
B. Binomial random variable  
C. Continuous random variable  
D. Both (B) and (C) but not (A)