

Statistics Ics Part 1 Chapter 8 Online Test

Sr	Questions	Answers Choice
1	Binomial distribution is used when n is	A. Large B. Small C. Negative D. Zero
2	Binomial distribution is positively skewed	A. $P < \frac{1}{2}$ B. $P > \frac{1}{2}$ C. $P = \frac{1}{2}$ D. $P < q$ and $q < P$
3	Mean, Median and mode of binomial distribution can be equal if	B. $P < q$ and $q < P$ C. $P > q$ and $q > P$ D. $P = q$
4	Variance of binomial distribution is	A. np B. \sqrt{npq} C. npq D. nq
5	Hypergeometric distribution is a	A. Continuous distribution B. Discrete distribution C. Simple distribution D. Normal distribution
6	Mean of hypergeometric distribution is	A. np C. np D. Nnk
7	N-K is classified as	A. Success B. Failures C. Parameters D. Range
8	The parameters of the binomial distributions are	A. x and n B. x and p C. p and q D. n and p
9	Which of the following is true for binomial distribution	A. Mean $>$ variance B. Mean $<$ variance C. Mean = variance D. Mean + standard deviation
10	The number of possible outcomes in Bernoulli trial is	A. Three B. Four C. Two D. One
11	A fair coin is tossed four times the probability of getting four heads is	A. $\frac{1}{4}$ B. $\frac{1}{2}$ C. $\frac{4}{6}$ D. 1
12	A fair die is rolled three times. The probability of getting three "aces" is	A. $\frac{1}{3}$ B. $\frac{1}{6}$
13	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
14	The probability of success ----- from one trial to another when trials are dependent	A. Remains constant B. Is changed C. One D. Zero

15	The repeated trials of binomial experiments are	A. Dependent B. Independent C. Fixed D. Variable
16	The binomial distribution is symmetrical if	A. $p = 1/2$ B. $P > 1/2$ C. $p < 1/3$ D. $P \text{ and } p$
17	The hypergeometric distribution has ----- parameters	A. One B. Two C. Three D. Four
18	In binomial experiment successive trials are:	A. Dependent B. Independent C. May be independent or dependent D. None of these
19	In binomial distribution, the random variable has a range:	A. $0, 1, 2, \dots, n$ B. $0, 1, 2, \dots, +\infty$ C. $-\infty$ to $+\infty$ D. ∞ to $+0$
20	The binomial distribution has the following parameters.	A. p and q B. n and q C. n , p and q D. None of these
21	Which of the following distribution(s) has 3 parameters.	A. Binomial distribution B. Hypergeometric distribution C. Both of the above D. None of these
22	The parameters of hypergeometric distribution are:	A. n, k and p B. n , k and q C. n , p and q D. n , k and N
23	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
24	The probability of success changes from trial to trial, is the property of:	A. Binomial experiment B. Hypergeometric experiment C. Both A and B D. None of these
25	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
26	The binomial distribution is symmetrical when:	A. $P > q$ B. $p = 1/2$ C. Probability of success & probability of failure are equal D. Both (B) and (C)
27	Which of the following case is true for hypergeometric distribution.	A. Probability remains constant for all trials B. Probability changes C. successive trials are dependent D. Both (B) and (C) but not (A)
28	The mean of binomial distribution is always:	A. Equal to variance B. Less than variance C. Greater than variance D. None of the these
29	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)
30	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)

A. Discrete variable

31	The binomial distribution deal with:	A. Discrete variable B. Continuous variable C. None of these
32	If in binomial distribution, $\mu = 6$, $p = 3/5$, the number of trial are:	A. 18 B. 30 C. 10 D. None of these
33	The probability of even/odd number when a fair die rolled is:	A. 1/6 B. 2/6 C. 1/36 D. 3/6
34	If we do not replace the draw 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
35	In hypergeometric distribution, the successive trials are.	A. Dependent B. Independent C. Both (A) & (B) D. None of these
36	Random numbers can be generated	A. Manually B. Mechanically C. Both a and b D. None of these
37	Random number can be generated manually by	A. Drawing cards from numbered cards B. Roiting or spinning numbered wheels C. Use of random numbers table D. All of these
38	Random numbers can be generated mechanically by	A. By use of digital computers B. Programmable calculators C. Ordinary calculators D. Both a and b
39	Its value cannot be exactly examined.	A. Ranodm variable B. Fixed variable C. Mathematical variable D. Variable
40	the discrete probability distributio may be represented by.	A. A table B. A graph C. A mathematical equation D. All of these
41	A copntinuous probability distribution may be represented by.	A. A table B. a graph C. A mathmethical equation D. Botha b and c
42	If the random variable X denotes the number of heads when three distinet coins are tossed, then X assumes the value.	A. 0,1,2,3 B. 1,3,3,1 C. 1,2,3 D. None of these
43	If x is discrete random variable, then the function f (x) is.	A. A probability function B. A density function C. A probability density function D. A distribution function
44	If x is a continuous random vriable, then the function f (x) is.	A. A probability function B. A probability denaity function C. A density function D. Both b and c
45	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 interal of values D. None of these
46	If X and Y are random varaibes, than $E (X - Y)$ is equal to.	A. $E(X) + E(Y)$ B. $E(X) - E(Y)$ C. $X - E(Y)$ D. $E(X) - Y$
47	if X and Y are independent random varaibes! 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. $E(X+Y)^2$
48	If X and Y are independent random variables the $F(XY)$ is equal to	A. $E(XY)$ B. $E(X) E(Y)$ C. $E(X) + E(Y)$ D. $E(X) - E(Y)$

48	If X and Y are independent random variables, and $E(X) = 4$, $E(Y) = 1$, then $E(XY)$ is equal to.	C. $XE(Y)$ D. $YE(X)$
49	If $E(X) = 4$ then find arithmetic means will be.	A. 1 B. 4 C. 0 D. 8
50	If C is a non-random variable then $E(C)$ is.	A. c B. 0 C. 1 D. x
51	An expected value of a random variable is equal to its.	A. Variance B. B.D. C. Mean D. Co - Variance
52	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
53	Random numbers are generated from the single digit numbers.	A. { 1,2,3,..... 10 } B. { 0, 1,2,..... 10 } C. { 0,1,2,..... } D. {0,1,2,..... 9}
54	Probability density function is the probability function of..... random variable.	A. Discrete B. Qualitative C. Continuous D. None
55	The probability density function $p(x)$ cannot exceed.	A. zero B. One C. Mean D. Infinity
56	In a discrete probability distribution the sum of all the probabilities is always	A. 0 B. 1 C. -1 D. 8