



WORKSHEET-13

SUBJECT - STATISTICS

Term : 1st

Topic – BINOMIAL DISTRIBUTION

Full Marks: 15

Date:11.06.2020

Class: XII

Q1. Select the correct alternative of the following questions.

(i)	The expectation in Binomial distribution $(3n, \frac{1}{3})$ is						
	a) n	b) n(1- p)	c) p(1-p)	d) none of these			
(ii)	The variance in Binomial distribution ($8, \frac{1}{2}$) is						
	b) 1.20	b) 2	c) 2.25	d) none of these			
(iii)	For a binomia a) 0	l distribution if mean i b) 1	s less than its v c) either 0 or 1	ariance, then p is equal to d) none of these			
(iv)	The binomial distribution $(n, \frac{p}{2})$ is leptokurtic if and only if						
	a) p = 1	b) p > 1	c) p< 1	d) none of these			
(v)	In a Bin (n, $\frac{1}{2}$), P (X = 0 U X = n)						
	a) $\frac{1}{2}$	b) $\frac{1}{2^n}$	c) $\frac{1}{2^{n-1}}$	d) none of these			
(vi)	$X \sim Bin(8, p)$ and $Y \sim Bin(8, q)$ independently, then covariance between X an Y is						
	a) 0	b) 0.5	c) -0.5	d) none of these			
(vii)	$X \sim Bin(n, p), P(X \ge a)$ is						
	a) left continu	ous b) right contin	nuous c)cont	inuous d) none of these			
(viii)	If for a random a) Positine	n variable X, if E(X– b) negative	E(X)) =0 then a c)a &b both	ll the observations are d) none of these			

(ix)	The mean deviation about mode is equal to mean deviation about median in					
	Bin (n, p) when p is equal to					
	a) $\frac{1}{2}$	b) $\frac{1}{3}$	c) 0	d)) none of these		
(x)	The 13 th order central moment of Bin $(n, \frac{1}{2})$ is					
	a) 0	b) n	c) $\frac{n}{2}$	d)) none of these		
(xi)	For the binomial distribution (12, $\frac{1}{2}$), the probability P(X = atmost 1)					
	a)13. $(\frac{1}{2})^{12}$	b) $1 - (\frac{1}{2})^{12}$	c) $1 - (\frac{2}{3})^{12}$	d) none of these		
(xii)	In Bin $(n, \frac{1}{2})$ mean is mode					
	a) Less than	b) greater than	c) equal to	d)) none of these		
(xiii)	If the mode of the binomial distribution is 3 and 4, then					
	a) $p = \frac{1}{2}$	b) $p > \frac{1}{2}$	c) $p < \frac{1}{2}$	d) none of these		
(xiv)	The mode of Bin (6, $\frac{1}{2}$) is/are					
(xiv)	a) 4 The mode of B	b) 3 Bin $(5, \frac{1}{2})$ is/are	c) 1	d) none of these		
	a) 2	b) 2 and 3	c) 2 or 3	d) none of these		

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Prepared by

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