ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

WORKSHEET-9

SUBJECT – STATISTICS

Term : 1st

Topic – BINOMIAL DISTRIBUTION **Class: XII**

Full Marks: 15 **Date:09.06.2020**

Q1. Select the correct alternative of the following questions.

(i) Binomial distribution is used for the random variable which is
a) discrete b) continuous c) both d) none of these
b)

(ii) The trials in binomial distribution are
a) finite b) countable c) countably finite d) none of these

(iii) The trials in binomial distribution are
a) independent b) dependent c) lin independent d) none of these

(iv) In each trial of binomial distribution , no of outcomes is
a) 1 b) 2 c) 3 d) none of these

(v) When an unbiased coin is tossed 5 times the probability of getting atmost one head is
a) $\frac{3}{16}$ b) $\frac{5}{16}$ c) 0 d) none of these

(vi) Th range of binomial distribution is
a) 1(1) n b) 1(2)n c) 0(1) n d) none of these

(vii) For a binomial distribution (n, p), cov(x, n-x) is
a) V(X) b) –V(X) c) 0 d) none of these

(viii) In a Bin (n , $\frac{1}{2}$), P (X = 0 ∩ X = n)

a) $\frac{1}{2}$ b) $\frac{1}{2^n}$ c) $\frac{1}{2^{2n}}$ d) none of these

(ix) X~ $Bin(8,p) and\ Y \sim Bin\ (8,q)$ independently, then correlation coefficient between Y and X is

a) 0 b) 0.5 c) -0.5 d) none of these

(x) X~ $Bin(n,p), P(X \leq a)$ is

a) left continuous b) right continuous c)continuous d) none of these

(xi) If for a random variable X, E(X) =0 then all the observations are

a) Positine b) negative c)a &b both d) n0ne of these

(xii) If a random variable realises infinite values, then expectation of that random variable must be

a) infinite b) negative c) zero d)) none of these

(xiii) If there are n values of a random variable and each with probability $\frac{1}{n}$, then E(X)=

a) $\frac{n+1}{2}$. b) $\frac{n}{2}$ c) zero d)) none of these

(xiv) For a random variable X, E($X - E(X)$) =

a) 0 b) 1 c) E(X) d) none of these

(xv) For a radom variable X, $(E(X^{-1})^{-1}$denotes

a) Variance b) harmonic mean c) median d) none of these

- **Prepared by**
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