ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

SOLUTION OF WORKSHEET- 28

SUBJECT – STATISTICS

Term : 2nd

Topic – Sampling & probability distribution **Class: XII**
Full Marks: 15 **Date:23 .11. 2020**

Q1. Select the correct alternative of the following questions.

(i) The expectation in Poisson distribution (3) is
a) 4 b) 6 **c) 3** d) none of these

(i) The variance in Poisson distribution (2) is
b) **2** b) 3 c) 2.25 d) none of these

(iii) Binomial distribution tends to Poisson distribution when p is too
a) small b) large c) 0.5 d) none of these

(iv) Binomial distribution tends to Poisson distribution when n is too
a) small **b) large** c) 0.5 d) none of these

(v) Defining the population in sample survey is a part of
(a) planning (b)execution (c)analysis (d) none of these

(vi) Selection of method of collection is a part of
(a) planning (b)execution (c)analysis (d) none of these

(vii) Designing the survey is a part of
(a) planning (b)execution (c)analysis (d) none of these

(viii) Traning of personnel is a part of
(a) planning (b)execution (c)analysis (d) none of these

(ix) For a binomial distribution if mean is equal to its variance, then p is equal to
a) 0 b) 1 c) either 0 or 1 d) none of th

(x) The binomial distribution(n+2, $\frac{p}{2}$) is symmetric if and only if

a) p = 1 b) p $>$ 1 c) p$<$ 1 d) none of these

(xi) The binomial distribution(n+3, p) is positivey skewed if and only if

a) p =$\frac{1}{2}$ b) p $>$ $\frac{1}{2}$ **c) p$<$ $\frac{1}{2}$** d) none of these

(xii) The binomial distribution(n+3, p) is negatively skewed if and only if

a) p =$\frac{1}{2}$ **b) p $>$ $\frac{1}{2}$** c) p$<$ $\frac{1}{2}$ d) none of these

(xiii) The binomial distribution(n+3, p) attains maximum variance at

a) p =$\frac{1}{2}$ b) p $>$ $\frac{1}{2}$ c) p$<$ $\frac{1}{2}$ d) none of these

(xiv) The binomial distribution(n, p) the minimum variance is

a) p =$\frac{1}{2}$ b) p = $\frac{n}{4}$ c) p$<$ $\frac{1}{2}$ **d) none of these**

(xv) If X$\sim$ $Poisson(0.5)$, then P(X= 0) is

a) $\boldsymbol{e^{-0.5}}$ b) $e^{0.5}$ c) e^{-3} d) none of these

Prepared by

SANJAY BHATTACHARYA