



ST. LAWRENCE HIGH SCHOOL
A JESUIT CHRISTIAN MINORITY INSTITUTION



WORKSHEET-17

SUBJECT - STATISTICS

Term : PRE TEST

Topic - PROBABILITY DISTRIBUTION

Class: XII

Full Marks: 15

Date:29.06.2020

Q1. Select the correct alternative of the following questions.

- (i) Values of the random variable are always
 - a) Positive real numbers
 - b) negative real numbers
 - c) both
 - d) none of these
- (ii) For a negative random variable X, Var(X) must be
 - a) **Positive**
 - b) Negative
 - c) 0
 - d) none of these
- (iii) Binomial distribution is symmetric when
 - a) $p < \frac{1}{2}$
 - b) $p > \frac{1}{2}$
 - c) $p = \frac{1}{2}$
 - d) none of these
- (iv) If E(X) is negative then X must be a random variable
 - a) Positive
 - b) negative
 - c) both
 - d) none of these
- (v) If expectation of a random variable is zero, values of the random variable may be
 - a) same
 - b) different
 - c) both
 - d) none of these
- (vi) Uniform distribution is
 - a) symmetric
 - b) positively skewed
 - c) negative skewed
 - d) none of these
- (vii) A statistic is function of all the members of a
 - a) population
 - b) sample
 - c) both
 - d) none of these
- (viii) If X is a symmetric binomial variable with $n=36$, then sd of x is
 - a) 3
 - b) 4
 - c) 9
 - d) none of these

- (ix) For a binomial variable $(n+1)p$ is an integer then it is
a) unimodal b) bimodal c) trimodal d) none of these
- (x) The third order central moment of a uniform distribution is
a) -1 b) 0 c) 1 d) none of these
- (xi) Uniform distribution is
a) leptokurtic b) mesokurtic c) platykurtic d) none of these
- (xii) Skewness of a uniform distribution is
a) -1 b) 0 c) 1 d) none of these
- (xiii) β_2 of a uniform distribution is less than
a) 1.4 b) 1.8 c) 2 d) none of these
- (xiv) In uniform distribution all the observations have probability
a) same b) monotonic c) anything d) none of these
- (xv) The mode of uniform distribution is represented by
a) all the observations b) none of the observations
c) few observations d) none of these

Prepared by
Sanjay Bhattacharya