WORKSHEET-22

SUBJECT – **STATISTICS**

Term : 1ˢᵗ

Topic – Dispersion   **Class: XI**
Full Marks: 15   **Date:22 .08. 2020**

Q1.   Select the correct alternative of the following questions.

(i)   The marks of 7 students in a class test are 1, 2, 4, 7, 8, 11,11, 13. The standard deviation is
(a) 2   (b)4   (c)8   (d) none of these

(ii)   The variance is used to calculate the average of
(a) all values   (b) observation in GP (c)observation in AP   (d) none of these

(iii)   The marks of 5 students in a class test are 2, 4, 4, 7, 7, 8, 23. The variance is
(a) 2   (b)4   (c)11   (d) none of these

(iv)   If all the Observation is equal to $-\frac{1}{7}$, then the standard variance is equal to
(a) 0   (b) $\frac{1}{5}$ (c)-5   (d) none of these

(v)   Variance of -(2n+3), ..., -1, 0, 1, ... , (2n-1) is
(a) -1   (b) 0   (c) $\frac{n-1}{2}$ (d) none of these

(vi)   Variance of cast of several people
(a)n-1   (b) 0   (c) $\frac{n-1}{2}$ (d) none of these

(vii)   Variance can always be calculated of a set having observation
(a) countably infinite   (b) uncountably infinite
(c) uncountably finite   (d) none of these

(viii)   If 5x= 9y and variance of x is 7, then mean deviation about mean of y is

(a) 0   (b)1   (c)0. 5   (d) none of these

(ix)   The combined variance depends upon the

(a) 1st set   (b) 2nd set   (c) both   (d)none of these

(x)   The variance is less than the nth part of range of the given sets where n is

(a) half   (b) one third   (c) same   (d) one fourths

(xi)   The variance is greater than the $\frac{1}{2n}$ of the

(a) mean   (b) median   (c) mode   (d) range

(xii)   The standard deviation is greater than the absolute difference between mean and

(a) gm   (b) hm   (c) median   (d) none of these

(xiii)   There are 12 observations with variance 3. If 0.3 is added to all the observations then the standard deviation of the new set is

(a) 3   (b) 3.3   (c) 30   (d) none of these

(xiv)   There are 10 observations with standard deviation 4. If all the observations be multiplied by 4 then the variance of the new set is

(a)4   (b) 8   (c) 16   (d) none of these

(xv)   The observations are 1,2, 3, 4, 5, 6 then variance is

(a) 0   (b) 7   (c) 8   (d) none of these

Prepared by
Sanjay Bhattacharya